DOCUMENT RESUME

ED 467 839 EC 309 140

AUTHOR	Gubbins, E. Jean, Ed.; Siegle, Del, Ed.
TITLE	The National Research Center on the Gifted and Talented Newsletter, 2001.
INSTITUTION	National Research Center on the Gifted and Talented, Storrs, CT.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	2001-00-00
NOTE	34p.; Published biannually. For the year 2000 issues, see ED 451 674.
CONTRACT	R206R000001
AVAILABLE FROM	National Research Center on the Gifted and Talented, University of Connecticut, 2131 Hillside Rd, Unit 3007, Storrs, CT 06269-3007. For full text: http://www.gifted.uconn.edu/newslttr.html.
PUB TYPE	Collected Works - Serials (022)
JOURNAL CIT	National Research Center on the Gifted and Talented Newsletter; Spr-Fall 2001
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	Ability Identification; Achievement Tests; Beliefs; *Career Counseling; *Educational Testing; Elementary Secondary Education; *Gifted; *Knowledge Base for Teaching; Research Projects; Teacher Role; *Teacher Student Relationship; *Underachievement
IDENTIFIERS	*National Research Center on Gifted and Talented

ABSTRACT

This document contains the spring and fall 2001 newsletters of the National Research Center on the Gifted and Talented (NRC/GT). The spring 2001 issue contains the following featured articles: (1) "Using Gifted Education Strategies with All Students" (E. Jean Gubbins and NRC/GT Research Team); (2) "New Center for the Pyschology of Abilities, Competencies, and Expertise (PACE Center) Announced by Yale University"; (3) "Suicide among Gifted Adolescents: How to Prevent It" (Denise de Souza Fleith); (4) "The Emotional Journey of the Gifted and Talented Adolescent Female" (Suzanne Blakeley); and (5) "Extending Gifted Education Pedagogy to the Regular Classroom" (M. Sue Whitlock and E. Jean Gubbins). The fall 2001 issue contains the following featured articles: (1) "NRC/GT Looks at Responses: You're Having a Test!" (E. Jean Gubbins); (2) "The National Research Center on the Gifted and Talented" (describes a research agenda that centers on the theme of transitions from potential to performance and provides abstracts of the NRC/GT research studies on promoting the achievement of low income, gifted, middle school students; the Schoolwide Enrichment Reading Framework; factors inhibiting enrollment in advanced placement and the International Baccalaureate programs; state standardized testing programs; differentiated instruction; talent identification; and transitions of giftedness); (3) "Effective Coaching: Helping Teachers Address Academic Diversity" (Catherine M. Brighton); and (4) "NRC/GT's Work in the Past Five Years" (Robert J. Sternberg). Most articles contain references. (CR)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 467 839

The National Research Center on the Gifted and Talented Newsletter, 2001

Editors

E. Jean Gubbins
Del Siegle

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- [] This document has been reproduced as received from the person or organization originating it.
- [] Minor changes have been made to improve reproduction quality
- [] Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

EC 309 140

BEST COPY AVAILABLE

THE National Research Center on the Gifted and Talented NEWSLETTER

Spring 2001

Inside

PACE Center ..... page 5
Suicide Among Gifted Adolescents ..... page 6
An Emotional Journey ..... page 9
Gifted Education Pedagogy ..... page 14

Using Gifted Education Strategies With All Students

E. Jean Gubbins & NRC/GT Research Team
University of Connecticut
Storrs, CT

Why and how do teachers change their teaching practices? Each year, millions, if not billions of dollars are spent providing professional development opportunities and buying teaching resources. Many teachers sit, listen, and simply return to their classrooms to do exactly the same things that they have done for years. Administrators and curriculum specialists often plan professional development activities, but little research exists on what it takes to make substantive change in teaching practices. Our research team (Karen L. Westberg, Deborah E. Burns, E. Jean Gubbins, Sally M. Reis, Susan Dinnocenti, Carol Tieso, Sunghee Park, Linda J. Emerick, and Lori R. Maxfield) investigated not only what happens if you try to extend the pedagogy of gifted education to regular classrooms, but also, what happens when you attempt to upscale an innovation? "... {H}ow do you take an innovation—what appears to be a promising practice—and spread it more than 50 miles from the place where it originated?" (NAGC Conference Transcript, 1999, p. 7).

First, we will highlight the tasks and findings from the multi-stage quantitative and qualitative study. Second, we will provide a brief explanation of the professional development module, followed by comments from liaisons and teachers as they reflected on the training process and materials. Detailed quantitative and qualitative results will be available in the NRC/GT research monograph documenting all phases of the study.

Overview the 5-year Research Study

The multi-stage quantitative and qualitative study required many tasks, including instrument development, field tests of assessment forms, pilot studies of professional development materials, interviews, observations, and focus groups. Each task also required many steps. Highlights of tasks and key findings are outlined below:

1995-1996

Designed, implemented, and analyzed a national survey of professional development practices in gifted education. Created survey items that were examples of high quality, successful professional development practices. Analyzed national survey data from three samples: random sample of teachers across the country (n=1,231), sample of educators associated with the NRC/GT's Collaborative School Districts (n=100), and sample of purchasers of the NRC/GT videotape modules (n=205). Prepared article highlighting results of the national survey. Presented survey findings at local, national, regional, and international conferences and workshops. In general, the findings indicate that professional development opportunities in gifted education are limited in nature, degree, and scope (Westberg, et al. 1998).

Key Findings

- A very small proportion of school districts' total professional development dollars is spent on gifted education topics (4%).
- Gifted education specialists rarely provide professional development training to other faculty members within their school district.
- The majority of districts do not evaluate the impact of their professional development practices in gifted education on teachers and students.
- Peer coaching between classroom teachers and gifted education teachers is seldom (25%) or never (28%) used to provide professional development.

1996-1997

Designed, implemented (19 districts), and analyzed field-test results of four professional development modules (i.e., complete training packages) on conceptions of giftedness, curriculum modification, curriculum differentiation, and enrichment learning and teaching.

Key Findings

- Trainers evaluated the training materials as high quality.

(continued on page 2)

(continued from page 1)

- Trainers requested more examples of strategies to help them with their coaching responsibilities.
- Trainers wanted samples of completed forms.
- Trainers recognized the reluctance to change teaching practices among some staff members.
- Trainers viewed administrative support as an important element to keep the focus of the innovation.

1997-1999

Redesigned the piloted professional development modules and created one, large module with all the training materials, which became known as the "BIG RED BOOK" (all but the NRC/GT videotapes and handbooks were in a 4-inch red notebook). Implemented a 2-year study of using gifted education strategies with all students in regular classrooms. Worked with over 30 school districts. Delivered training to local elementary and middle school teachers by organizing a group of local liaisons. Organized control groups within the same districts, but not in the same schools, and the control group teachers continued with their normal classroom routines. Developed multiple documentation techniques, including portfolios, anecdotal report forms, logs, and instruments. Developed instruments focusing on classroom practices, assumptions about giftedness, implementation strategies, students' activities, and stages of implementation of the innovation. Maintained written, e-mail, and telephone communications.

Key Findings

- Liaisons successfully adopted the training materials in the four professional development modules.
- Liaisons recognized the increase in their depth and breadth of knowledge in how to modify, differentiate, and enrich curriculum.
- Teachers appreciated opportunities to discuss their curricular approaches with the liaison and other teachers.
- Liaisons requested samples of completed forms that illustrated how other teachers changed their instructional and curricular approaches.
- Liaisons needed more examples to share with teachers as they addressed specific content areas in various grade levels.

1999-2000

Analyzed all quantitative and qualitative data from the 2-year intervention study. Prepared drafts of chapters for the technical monograph. Redesigned the professional development module based on the intervention study.

Key Findings

- Liaisons successfully used the NRC/GT professional development module with local teachers.
- Liaisons became local experts as a result of their knowledge and experiences with modifying, differentiating, and enriching curriculum.
- Liaisons recognized the need to differentiate training for local teachers. Just as the students were not all at the same level of expertise, neither were the teachers who agreed to participate in the intervention study.
- Teachers learned how to enhance or change some of their instructional and curricular strategies. Not all teachers were as successful with the strategies. Some persevered; others did not continue as participants.
- Teachers benefited from the long-term nature of the study.
- The learning curve for teachers and liaisons varied.
- Teachers responded positively to the strategies as they reflected on the positive responses of their students.
- Teachers and liaisons who were supported by their administrative teams found it easier to support the implementation of an innovation.
- Experimental group teachers changed their classroom practices, as compared to control group teachers.
- Students who worked with experimental group teachers reported positive changes in their class activities.
- Teachers raised their level of expectations for student work. They recognized that students were ready for challenging work.
- Change "hurts." It is a realization that what you are comfortable with may not be the best approach for you as a teacher or for your students.

The Module as a Training Program

We prepared a professional development module, consisting of background information on the NRC/GT, and we shared research findings from previous studies focusing on instructional and curriculum practices in regular classrooms. We developed over 85 transparencies with accompanying scripts. Four topics were introduced: conceptions of giftedness, curriculum modification, curriculum differentiation, and enrichment teaching and learning. In addition, each liaison received NRC/GT videotapes, handbooks, and articles that extended discussions on the topics.

We invited elementary and middle school teachers of the gifted and classroom teachers from over 30 districts to serve as liaisons. As they prepared for the training of local

teachers, liaisons studied the professional development module described above. In essence, two interventions were occurring: training of liaisons and training of teachers who, in turn, worked with their students.

Liaisons as Trainers

Liaisons assumed a huge responsibility as local trainers. Even if they viewed themselves as minimally or highly experienced, they immediately recognized that they needed to review and study all materials intensively. One liaison said:

> I panicked . . . . We were in an unusual situation because I think all the other districts had one person, and ours—there were two, and that's another story. So, we did have the luxury of having each other, and we planned a time to sit down and go through the book, and we thought, "Oh, a couple of hours we'll get through it." After four hours, we decided we were going to have to meet again, and I think again and again. I think we met many hours trying to get ready. . . . (NAGC Conference Transcript, 1999, pp. 39-40)

The professional background of the liaisons varied. Some were quite familiar with identification, programming, and curriculum models in our field through formal coursework and years of experiences; others were self-taught and eager to learn more. One experienced liaison commented:

> I found that while we went into this very willing and ended it very willingly, . . . it was a learning curve for me, as well as for the participants. Having been in the field for quite awhile, I thought I knew everything in terms of the strategies. . . . But {not} actually delivering it in that kind of format. The materials in the book were rich. We now use them all the time with other training models and training sessions that we do in our school system. And so, the material was wonderful, but there was a lot of it . . . . I had to sit down and pour through the material, and organize it in a way that I thought was clear for the people on the receiving end. Because I believe teachers can be some of the hardest audience, you know. And so, I didn't feel comfortable getting up in front of the group unless I felt I really knew that material. (NAGC Conference Transcript, 1999, pp. 38-39)

Curriculum: Activities or Events

We knew from our earlier NRC/GT studies and the research conducted by others in the field of gifted and talented education that the academic needs of young people were not the cornerstone of planning and implementing curriculum. Oftentimes a series of activities or a collection of discrete skills served as lessons. One liaison shared the following reflection about what goes on in elementary schools:

> You are probably familiar with teachers who have units on the apple, watermelon, and the pumpkin. Do you know what I'm talking about? My biggest challenge was with the group of first grade teachers who . . . had their training in the spring, were determined they weren't really going to do any implementation until fall because you can't start anything new until you think about it over the summer, and start in September, okay? So, that was their mindset. They couldn't change direction in the middle of the year, or so they perceived. And so, when I went to work with the first grade teachers, their big overall unit of which they {included} everything—math, science, social studies, reading—revolved around the watermelon in September, and pumpkin in October and [apple in] November. And I'm not lying. It's a stretch of the imagination even to think it, but that's what it was. And so, I spent a lot of time meeting with . . . teachers. {The gifted teacher and I} were trying to get them to look at . . . big ideas. . . . {I}t was a real struggle for them. That was a whole new way of thinking. {The teachers needed to look} at modifying "their idea of curriculum." (NAGC Conference Transcript, 1999, p. 49)

When you think about how some teachers might approach their curricula, you understand how the notion of holidays, activities, worksheets, workbooks, and educational games can fill the hours of the school day. We needed to break down this mindset in some cases. In other cases, we needed to provide the rationale for upscaling the curriculum and include enough examples of how-to-do it; and in still other cases we just needed to help teachers critique the quality of their available instructional resources and develop high-quality alternatives. Therefore, professional development was the focus of our research. As noted in *National Excellence: A Case for Developing America's Talent*:

> Teachers must receive better training in how to teach high-level curricula. They need support for providing instruction that challenges all students sufficiently. This will benefit not only students with outstanding talent but children at every academic level. (United States Department of Education, 1993, p. 3)

Curriculum: Critique and Creation

Liaisons were responsible for demonstrating a series of strategies often associated with the gifted education literature. Of course, these strategies did not necessarily originate in our field, but they have become part of the parlance for explaining why students need curricular options to really meet their needs and challenge their talents and abilities. We asked liaisons to help teachers focus on questions such as the following for modifying, differentiating, and enriching the curriculum:

(continued on page 4)

(continued from page 3)

Curriculum Modification

What is the quality of the curriculum? Does it focus on big ideas or concepts? Is it repetitious?

Curriculum Differentiation

What are the academic needs of your students? How can you create or adapt curriculum opportunities to meet these needs?

Enrichment Learning and Teaching

What do students already know? How can you use formal and informal assessment techniques to assess their knowledge and compact the curriculum? What types of replacement strategies are appropriate for students who have mastered the curriculum? How can you accelerate the content? How can you extend and enrich the curriculum?

Assessing Classroom Practices

Assessing classroom practices at a distance was quite a challenge. Paper instruments were the proxies for our "presence" in classrooms near and far. Since we could not and did not want to be on-site to observe and shape the intervention, we developed a wide variety of instruments that would hopefully elicit critical details, documenting the implementation process. Our eyes and ears were the liaisons and teachers. Of course, we used additional data collection techniques to ensure that we captured as much information as possible, including frequent updates via phone calls, anecdotal reports, informal discussions at conferences and workshops, lesson plans, student products, and selected site visits towards the end of the intervention. Collectively, all of these data provided the "observation window" of the extent to which the pedagogy of gifted education can be used with all students.

Teacher Change

Analyzing the quality of their own teaching was critical to change and growth. It was important to ask questions such as: What do I do well? What needs to be improved? How do I improve my teaching ability? Obviously, teaching is both an art and a science. Sometimes teachers were overwhelmed with the new content and strategies, new models of teaching, or new assessment techniques. Metacognitive strategies that promoted reflection on teaching helped teachers understand the need for change. One liaison offered an explanation of the difference between the before and after of using the "BIG RED BOOK":

> This is just a general before and after kind of a question with the teachers I worked with, but I think in general what you talked about—the big idea—understanding—they realized when they started to look at what they were teaching and how they were teaching and how they were going to change it for whatever method they had chosen—they had to reflect upon what it was they were teaching, and why they were teaching it. And I think that was a big before and after. I think they learned through that process that sometimes they were doing things that didn't have a great purpose or a great understanding behind it. And that creates that self-reflection, I think that was the biggest before and after overall. (NAGC Conference Transcript, 1999, pp. 49-50)

"Some people have changed a little and some people have made a sea of change" (Emerick, 1999). Individuals involved in the innovation determined the extent of change. So many personal, motivational, and attitudinal variables affect the extent of their own change process. While admitting that the implementation process was "exhausting" and "too much,"

> two {teachers} stated emphatically that "the real difference . . . is looking at student work and seeing what students are getting out of it." One stated, "I'm really trying to work with different things. I've used things that I've developed . . . so I'm using those ideas and I'm broadening {them}, too . . . ." (Emerick, 1999, p. 3)

Another teacher confirmed that she changed her approach to teaching. "I also have done lessons on goals, reaching goals, and what are goals, and how . . . obstacles get in the way of accomplishing goals" (NAGC Conference Transcript, 1999, p. 52). Projects, as a way of documenting what students have learned, have also changed—no more word searches, fill-in-the-blanks, or worksheets. Students were now engaged in hands-on activities that challenge their knowledge and increase the expectations for truly understanding and using new content and skills.

Teachers recognized that students became more independent as learners, as they acquired skills of search and techniques for posing questions and finding answers. One liaison offered the following comment about the students:

> As far as [the] students, it's made them become much more independent as learners, and it's given {them} many more choices. And what we expect the students to do to use higher level thinking skills, and make decisions—really the study teaches us to do the very same thinking. It's been quite an intellectual exercise for the teachers. (NAGC Conference Transcript, 1999, pp. 53-54)

One teacher devised a "mantra of change" by reviewing what she learned throughout the study and listing the types of strategies that would now be her approach to extending gifted education strategies to all students:

I will continue to pretest and activate background knowledge before the start of every unit.
I will continue to assess my students' interests as well as knowledge level.
I will continue to assess my lessons for the following: Do products assignments differ. . .? Do my work groups offer flexibility. . .? Do my students feel challenged by the material presented?
I will continue to discuss, debate, gather differentiation ideas with co-workers. (Teacher #535) (Dinnocenti. 2001)

This study of gifted education strategies yielded a considerable amount of knowledge. For this article, we chose to share some comments from liaisons and teachers because they were the key people in the intervention. As a group, they once again confirmed the tenet that change is a process that requires support, reflection, and human and material resources. It also requires an element that is not always obvious at first. Students' reactions to the innovation served as very strong motivators to stay with the change process.

References

Dinnocenti, S. (2001). *Summary of teacher portfolios.* Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.

Emerick, L. (1999). *Qualitative data for the extending gifted education pedagogy to the classroom study.* Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.

National Association for Gifted Children Conference Transcript. (1999). *NRC/GT study of extending gifted education strategies to all students.* Storrs, CT: NRC/GT Transcript from NAGC Conference.

United States Department of Education. (1993). *National excellence: A case for developing America's talent.* Washington, DC: Office of Educational Research and Improvement.

Westberg, K. L., Burns, D. E., Gubbins, E. J., Reis, S. M., Park, S., & Maxfield, L. R. (1998, Spring). Professional development practices in gifted education: Results of a national survey. *The National Research Center on the Gifted and Talented Newsletter,* pp. 3-4.

New Center for the Psychology of Abilities, Competencies, and Expertise (PACE Center) Announced by Yale University

Traditionally, "abilities" and "expertise" have been viewed as separate and largely distinct constructs and research areas within the broader field of psychology. In this traditional view, the psychology of abilities studies people's largely innate capabilities and the psychology of expertise studies the development and structure of people's mastery of skills. A new Center has opened at Yale dedicated to the idea that these two areas of psychology are inextricably intertwined and that abilities represent a form of developing expertise. According to this idea, abilities are always assessed through tests of some kind of expertise (e.g., in solving analytical-reasoning problems); expertise, in turn, always depends in part upon abilities, including cognitive ones (e.g., analytical skills) as well as motivational ones (e.g., ability to practice in a focused and deliberate way) and even affective ones (e.g., emotional intelligence). Competencies, in turn, are realized abilities on their way toward the further development of expertise.

The Yale Center for the Psychology of Abilities, Competencies, and Expertise currently comprises a group of about two dozen researchers (including teaching and research faculty, research scientists, postdoctoral fellows, and graduate students) investigating various aspects of abilities, competencies, and expertise. It is physically located at 340 Edwards Street in New Haven, Connecticut. Its Director is Robert J. Sternberg, IBM Professor of Psychology and Education at Yale; the Deputy Director is Elena L. Grigorenko, Research Scientist in the Psychology Department and Child Study Center at Yale (and also Associate Professor of Psychology at Moscow State University); and the Assistant Director is Linda Jarvin, Associate Research Scientist in Psychology at Yale. The Center is a part of the Department of Psychology and is associated with a new graduate program in the Psychology Department at Yale in Abilities and Expertise, with which almost half of the psychology faculty is affiliated

The Center currently has about $7 million in grants and contracts from the National Science Foundation, U.S. Office of Educational Research and Improvement, U.S. Army Research Institute, and W. T. Grant Foundation. Current projects include, among others, studying (a) effective ways of exploiting the link between abilities and expertise in teaching and assessment; (b) how the nature of abilities and expertise changes over the life span and how the two constructs differ among groups; (c) leadership development; and (d) the nature of wisdom and how effectively to teach for it. The web page for the Center is www.yale.edu/pace and inquiries can be addressed to robert.sternberg@yale.edu.

(continued on page 6)

Suicide Among Gifted Adolescents: How to Prevent It

Denise de Souza Fleith
University of Brasilia
Brazil

The rate of suicide among children 10 to 14 years of age increased 100% between 1980-1996. Among youngsters 15-19 years of age, the rate of increase was 114%, making suicide the fourth leading cause of death for this age group (U.S. Department of Health & Human Services, 1999). While suicide rates among adults have steadied or declined over the past few decades, suicide rates of young people have increased (*Teenage Suicide*, 2000a). The literature has reported affective states, environmental conditions, and interpersonal problems as suicide risk factors (Blatt, 1995; Dixon & Scheckel, 1996; Hayes & Sloat, 1990). Although literature on the relationship between suicide and giftedness is scarce, as are the statistics involving suicide rates among gifted adolescents, characteristics often associated with gifted and talented young people are also viewed as suicide risk factors (Dixon & Scheckel, 1996).

The most salient characteristics of gifted adolescents that may be associated with vulnerability to social and emotional disturbances are: (a) perfectionism, (b) supersensitivy, (c) social isolation, and (d) sensory overexcitability (Delisle, 1986; Dixon & Scheckel, 1996; Fleith, 1998; Hayes & Sloat, 1989). Driven by a self-oriented or socially prescribed perfectionism, the individual establishes high and rigid standards. To do the best is no longer enough and the individual feels frustrated no matter how well he/she performs (Lajoie & Shore, 1981). Excessive concern about errors, in addition to high parental and societal expectations, can result in depression and absence of self-worth. Many gifted youngsters believe they are loved for their grades, honors, and special abilities. As a result, they do not allow themselves to fail or make a mistake. " The shame and guilt of 'failure' can lead them to suicide" (Nelson & Galas, 1994, p. 47).

In the school environment, attention has been paid to raising standards and testing students. Academic success and cognitive development have been the focus of educational goals, especially for gifted students. Students may feel the pressure to succeed. However, the emotional and social development of these youngsters has been neglected by the school. As explained by Pollack (*Teenage Suicide*, 2000b), "you cannot separate out students' emotional report card from their academic report card" (p. 22).

Supersensitivity may be associated with gifted students' heightened awareness about world problems and their feelings of frustration and powerlessness about making changes that can affect the world. Feelings of being abnormal or experiencing rejection from peers can lead the talented adolescent to experience severe identity problems. Finally, gifted adolescents who present traits of sensory overexcitability such as high energy levels, emotional intensity, unusual capacity to care, and insatiable love of learning may not find a receptive environment. The lack of support from family, peers, and teachers may also contribute to self-concept problems (Lovecky, 1993). When one or more of these issues occur, potential problems emerge. Gifted adolescents' inability to deal with complex and intense feelings may be a source of vulnerability that can contribute to suicidal thoughts.

Parents and teachers must recognize warning signals of suicide risk to successfully intervene. It is not merely because the adolescent is gifted that he/she is immune to emotional distress. According to Nelson and Galas (1994), some of the signals are:

- Suicide threats: Adolescents may either directly or indirectly tell others that they plan to commit suicide (e.g., "I have decided to kill myself," "I wish I were dead," "I just cannot go on any longer," "I am getting out; I am tired of life").
- Sudden changes in behavior: Adolescents may begin to perform poorly in school, skip school, stop caring about how they look, lose interest in the things they used to love, sleep more than usual, stay out late for no reason, or present sudden weight changes.
- Withdrawal from friends: Adolescents may prefer to stay in their rooms and not socialize with others.
- Giving away treasured possessions: A suicidal adolescent may pass along his/her favorite items saying he/she will not need them anymore.
- Tying up loose ends: Adolescents may present a sudden desire to take care of details such as answering a letter that is overdue, or returning something he/she has borrowed.
- Poor self-esteem: Adolescents can feel they are not capable of doing things (e.g., "I cannot do anything right," "I am stupid"), they perceive themselves as worthless and unlovable, or they stop getting involved in activities. This behavior is associated with lack of enthusiasm, low energy, and lack of motivation.
- Increased irritability: Adolescents who want to commit suicide may present aggression, rebellion, and disobedient behaviors towards parents, friends, and teachers. These sudden outbursts are unusual and surprising and may isolate the student from others.

- Self-destructive behavior: Suicidal youngsters may act as if they are trying to hurt themselves (e.g., driving cars or bikes recklessly, carrying a gun, smoking and drinking heavily, developing anorexia nervosa or bulimia). "Autopsies of adolescent suicide victims show that one-third to one-half of the teenagers were under the influence of drugs or alcohol shortly before they killed themselves, according to HHS statistics" (*Teenage Suicide*, 2000a, p. 25).

Recommendations

It is difficult to develop a plan to prevent suicide without considering the role of family, school, peers, and community. Parents should assist gifted children:

- Provide mutual trust and approval (Silveman, 1993a).
- Support children's interests (Silveman, 1993a).
- Value creative and intellectual efforts (Silveman, 1993a).
- Provide quality time and communication (Silveman, 1993a).
- Respond to children's needs (Silveman, 1993a).
- Reconcile their demands with their children's aspirations (Silveman, 1993a).
- Acquire more information about adolescent suicide (Nelson & Galas, 1994).
- Become involved in finding solutions to the suicide problem (Nelson & Galas, 1994).

The school environment can contribute to suicide prevention:

- Fulfill the needs of gifted and talented students.
- Schedule individual and group counseling as a part of the educational gifted curriculum (Farrel, 1989).
- Provide training on suicide prevention to school personnel (from bus drivers to custodians to teachers) to help them recognize behavioral clues that a student is at risk (Delisle, 1990; *Teenage Suicide*, 2000b). Teachers should also read students' essays attentively. Many of them may contain references to suicidal thoughts.
- Provide resources on suicide prevention to school staff (Delisle, 1990).
- Provide training on suicide prevention to students who may act like peer helpers (Nelson & Galas, 1994).

The school should also provide opportunities to gifted students:

- Learn how to set priorities and avoid overcommitting themselves (Silverman, 1993b).
- Understand their strengths and weaknesses (Silverman, 1993b).
- Develop self-acceptance and recognition of their limitations (Silverman, 1993b).
- Reframe the notion of a mistake as a learning experience (Silverman, 1993b).
- Develop problem-solving and communication skills (Silverman, 1993b).
- Challenge the idea that suicide is an honorable solution (Cross, Cook, & Dixon, 1996).
- Deal with tense situations with humor (Webb, Meckstroth, & Tolan, 1983).
- Identify the sources of stress (Nelson & Galas, 1994).

The school should also:

- Create an environment where students feel comfortable talking about their difficulties. Male students are not usually encouraged to talk about emotions so they are guided toward physical outlets. According to the U.S. Department of Education (*Teenage Suicide*, 2000a), "teenage girls attempt suicide three times as often as boys do, but males are four times more likely to finish the job" (p. 22).
- Create an environment where students are encouraged to dream and use their imagination.
- Implement activities that nurture and highlight students' interests, strengths, and abilities.

Community resources such as libraries, as well as working with professionals and mentors can provide an important cognitive and emotional support for the gifted adolescent (Fleith, 1998).

Conclusions

Educators and parents must turn their attention to the emotional and social needs of gifted and talented youngsters. It is important to remember that some youngsters may be at risk. According to the American Association of Suicidology, it is urgent to promote and create conditions (in the family, school environment, and community) that will nurture cognitive and affective needs of young people. As Boldt wrote: "Human dignity is rooted in a good life, a sense of community, a positive self-worth, and so on. We promote human dignity when we provide these life conditions" (1989, p. 7).

References

Blatt, S. J. (1995). The destructiveness of perfectionism. *American Psychologist, 50,* 1003-1020.

Boldt, M. (1989). Defining suicide: Implications for suicidal behavior and suicidal prevention. In R. F. W. Diekstra, R. Maris, S. Platt, A. Schmidtke, & G. Sonneck (Eds.), *Suicide and its prevention* (pp. 5-13). Leiden, The Netherlands: E. J. Brill.

(continued on page 8)

(continued from page 7)

Cross, T. L., Cook, R. S., & Dixon, D. N. (1996). Psychological autopsies of three academically talented adolescents who committed suicide. *The Journal of Secondary Gifted Education, 7*, 403-409.

Delisle, J. R. (1986). Death with honors: Suicide among gifted adolescents. *Journal of Counseling and Development, 64*, 558-560.

Delisle, J. R. (1990). The gifted adolescent at risk: Strategies and resources for suicide prevention among gifted youth. *Journal for the Education of the Gifted, 13*, 212-228.

Dixon, D. N., & Scheckel, J. R. (1996). Gifted adolescent suicide: The empirical base. *The Journal of Secondary Gifted Education, 7*, 386-392.

Farrel, D. M. (1989). Suicide among gifted students. *Roeper Review, 11*, 134-139.

Fleith, D. S. (1998). Suicide among talented youngsters: A sociocultural perspective. *Gifted Education International, 13*, 113-120.

Hayes, M. L., & Sloat, R. S. (1989). Gifted students at risk for suicide. *Roeper Review, 12*, 102-107.

Hayes, M. L., & Sloat, R. S. (1990). Suicide and gifted adolescent. *Journal for the Education of the Gifted, 13*, 229-244.

Lajoie, S. P., & Shore, B. M. (1981). Three myths? The over-representation of the gifted among dropouts, delinquents, and suicides. *Gifted Child Quarterly, 25*, 138-143.

Lovecky, D. V. (1993). The quest for meaning: Counseling issues with gifted children and adolescents. In L. K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 29-50). Denver, CO: Love.

Nelson, R. E., & Galas, J. C. (1994). *The power to prevent suicide: A guide for teens helping teens.* Minneapolis, MN: Free Spirit.

Renzulli, J. S. (1986). The three-ring conception of giftedness: A developmental model for creative productivity. In R. J. Sternberg & J. E. Davis (Eds.), *Conceptions of giftedness* (pp. 53-92). New York: Cambridge University Press.

Silverman, L. K. (1993a). Counseling families. In L. K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 151-178). Denver, CO: Love.

Silverman, L. K. (1993b). Techniques for preventing counseling. In L. K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 81-109). Denver, CO: Love.

Teenager Suicide. The silent epidemic (2000a, April 12). *Education Week*, pp. 1, 22-31.

Teenager Suicide. The silent epidemic (2000b, April 19). *Education Week*, pp. 1, 20-31.

U.S. Department of Health and Human Services. (1999). *Surgeon General's Call to Action to Prevent Suicide.* [On-line] Available: http://www.mentalhealth.org/links/suicide.htm.

Webb, J. T., Meckstroth, E. A., & Tolan, S. (1983). Stress management: Some specific suggestions. *The Creative Child and Adult Quarterly, 6*, 217-220.

Resources

Capuzzi, D., & Golden, L. (1988). *Preventing adolescent suicide.* Muncie, IN: Accelerated Development.

Crook, M. (1992). *Please, listen to me! Your guide to understanding teenagers and suicide.* Bellingham, WA: Self-Counsel Press.

Davis, F. (1985). Suicidal crisis in school. *School Psychology Review, 14*, 313-324.

Delisle, J. R. (1992). *Guiding the social and emotional development of gifted youth: A practical guide for educators and counselors.* New York: Longman.

Grollman, E. A. (1988). *Suicide: Prevention, intervention and postvention.* Boston: Beacon Press.

Kolehamainen, J., & Handwerk, S. (1986). *Teen suicide: A book for friends, family, and classmates.* Minneapolis, MN: Lerner.

Patros, P. G., & Shamoo, T. K. (1989). *Depression and suicide in children and adolescents: Prevention, intervention and postvention.* Needham Heights, MA: Allyn and Bacon.

Peck, M. L., Farberow, N. L., & Litman, R. E. (1985). *Youth suicide.* New York: Springer.

Pevsner, S. (1989). *How could you do it, Diana?* New York: Clarion.

Polland, S. (1989). *Suicide intervention in the schools.* New York: Guilford Press.

Roeper, A. (1982). How the gifted cope with their emotions. *Roeper Review, 5*, 21-24.

Schmitz, C. C., & Galbraith, J. (1985). *Managing the social and emotional needs of the gifted.* Minneapolis, MN: Free Spirit.

Websites

American Association for Suicidology:
www.suicidology.org

Jason Foundation:
www.jasonfoundation.com

National Association of School Psychologists:
www.naspweb.org

Suicide Prevention Advocacy Network:
www.spanusa.org

Suicide Resources on the Internet:
psychcentral.com/helpme.htm

Youth Suicide Prevention Program:
depts.washington.edu/ysp

The Emotional Journey of the Gifted and Talented Adolescent Female

Suzanne Blakeley

Sarah rolled her eyes then laughed as half a dozen waiters gathered around the table to sing "Happy Birthday." Turning 16, our daughter recently celebrated a rite of passage that will soon bring car keys, added responsibilities, and long-awaited freedoms. It was a bittersweet moment for me: Sarah was still healing from an intense, yet brief depression, she battled during ninth grade.

At 14, our daughter lost a hard fought struggle. Her slow descent into depression began during fourth grade after our family's relocation to the East. Once self-confident and happy, she became filled with anxiety and frustration by the end of middle school. In ninth grade Sarah was haunted by rapid thoughts, and sleepless nights. Her tremendous mental energies eventually spiraled inward, settling into a looping, repetitive chant: I'm unacceptable.

"What is happening? Why me?" she cried. Nearly three decades ago, I asked myself these same questions when I suffered from a similar depression. I had hoped my own experience would spare my child such pain. Devastated, I assured Sarah that in time she would discover the answers to her questions.

The One Who Seems to Need the Least, Often Needs the Most

We notified the high school of her emotional difficulties and her teachers were surprised: Sarah had always been gregarious and maintained high marks. At home, however, she shed the mask she wore each day to school. Exhausted, she hurled angry looks and disrespectful comments toward family members before withdrawing to her room.

Sarah's depression was quite a storm that affected the entire family: her older sister was worried, patient and understanding; her father, identified as gifted in the late 1950s, began to speak openly about his own feelings of being misunderstood and "differentness." I felt alone, unaware of the wealth of available support and resources. Sarah's difficulties brought for me a deeper understanding of why special assistance is so essential for the gifted to achieve intellectual potential and the acceptance each requires and deserves.

Thankfully, her recovery was amazingly swift. Therefore, I share Sarah's story and our parental successes, failings, and revelations in the spirit of helping others. Sometimes courageous young women attending traditional public and private schools today "fall through the cracks."

Factoring in Past Life Experiences

Upon relocating, Sarah's father and I were delighted to find a community in proximity to a major metropolitan area, a school district that followed a similar curriculum, and a home within a neighborhood setting. Sarah—an extrovert and risk-taker born with an easy temperament—accepted the move as another one of life's great adventures, since past moves had brought positive experiences.

Her formative years were spent in large, homogeneous suburban districts located in the Midwest. Coursework was differentiated within the classroom to provide challenge based upon her individual learning style, abilities, and interest (Schoolwide Enrichment Model). Sarah advanced as far as she was capable, while avoiding much of the "differentness" that pullout programs or tracking often create among peers.

Teaching complemented Sarah's visual, hands-on, inductive learning style; she accepted the repetition of skills required to master certain materials without hesitation. Interdisciplinary activities allowed Sarah to work with peers of varying ages; her older sister also increased her opportunities, allowing even greater autonomy at a young age.

The district was responsive and well-funded with a strong infrastructure. Academic assessment was ongoing, and curriculum and conduct policies were well-developed and consistently followed. "Character Counts" and "Kindness is Contagious" programs ensured respectful interactions among peers and staff.

At an early age, Sarah understood that her action, inaction, or reaction to presented experiences were under her control. She learned how her voice and personal choices impacted her and those around her, further reinforcing independent development of positive life strategies. She flourished academically and personally.

Our parenting style closely parallels this type of educational environment. My husband and I share a strong bond based upon common values and similar intellect, and we continue a family tradition of open expression and respect. Our approach is individualized and authoritative with "directives" seldom issued. With praise and physical affection, we acknowledge good personal choices that dwell within guidelines set by a blend of Christian and Classical Western philosophies. Independent thought is stressed along with the right to personal expression, as long as it does not harm others.

(continued on page 10)

(continued from page 9)

We facilitate the learning process. Sarah moves freely beneath our guidelines to make personal decisions based upon her abilities and past choices. She is allowed to experience the natural consequences for inappropriate actions, which is often the most difficult part of parenting. We step in only when a choice or action may cause irreparable harm.

This type of parenting and Sarah's differentiated schooling promoted her exceptional problem-solving abilities, which enhanced her independence and self-discipline. During adolescence, her past experiences and our philosophy also created the fertile ground for plenty of "intellectual debate" as it invites questioning.

The Extroverted Gifted and Talented Adolescent Is Often a Lonely Profile

Bright and creative, Sarah's grades have always been excellent in all disciplines. Her talents literally exploded during middle school. One year she focused on mathematics, then the next year it would be language arts and music. This pattern continues into high school. Our daughter possesses the well-documented gifted intellectual and personality characteristics. Among other traits, her sensitivity, empathy, and drive to understand were heightened at 8 years old.

Sarah "stuck out" during middle school, physically maturing at 11. She was socially more mature and a full head taller than the majority of her peers. She was smart and "different" during a period when peer pressure mounts, and academics often take a back seat to socialization. Highly articulate, she also resolved peer conflict in an adult manner.

Considering Sarah's capabilities and innate strong sense of self, I recognized long ago that we must avoid treading upon her emerging independence: we must provide assistance without overprotection. She lacked life experience and her emotional maturity was not yet fully synchronized with her advanced intellectual and social development. This created difficulties when parenting her in a diverse world filled with "Instant Messaging," peer violence, and mixed media messages.

Our child allowed me a peek into her thinking during various stages of growth; poignant statements popped out unexpectedly while she accompanied me on errands, when I washed dishes, or at her bedtime (see box on the next page). During our mutual exploration of her thoughts, my daughter's personal choices assured me she was developing strategies and choosing appropriate activities to positively channel and balance her strengths.

Sarah voiced several concerns beginning in fourth grade: her dismay with an environment that lacked the opportunities she required for intellectual and personal growth; the uncivil and inconsistent behaviors of adults and peers; and the increasing lack of connection from peers.

A Shattered Idealism: Things Are Not the Way They Ought to Be

By the time Sarah entered middle school, district leadership was changing and the schools were in transition, struggling with increased State mandates, rising costs, and a lack of community funding. Sarah and we had minimal success with efforts to meet her needs. We were unable to move and Sarah chose not to go to a private school, due to the boarding requirement.

Sarah's friends began to choose different paths by the end of middle school. She tried to "blend in" by trying on different personas, and then she sought diversity on purpose in an attempt to bring attention to her right to individuality. Minimal extracurricular activities were available to promote new friendships and a sense of belonging within the school community.

Our daughter had instinctively pulled away from us and grown closer to her sister—four and a half years older—with whom she shared family values, past experiences, and meaningful conversation. She found acceptance and safety within the relationship.

Sarah was still optimistic the high school would open up opportunities. She practiced the entire summer for team try-outs since sports historically provided well-organized activities for friendships in the district. A few months into her freshman year, she found courses unchallenging and her peers now adjusting to newly acquired freedoms. She was constantly hazed and humiliated by older team players, and her involvement in a church group and a school club proved "pointless" as both were disorganized with no apparent goals. Sarah's sister also had left home to start her first year in college.

The impact of her repeated effort to reach out resulted in negative, not rewarding experiences. Sarah fought fiercely for a sense of belonging, and without the daily support of her sister, her anxiety and frustration increased. She became increasingly withdrawn and we sought help; I felt the potential for suicide was real and that she should be professionally monitored. I deliberately chose a woman therapist who was soft-spoken and gentle, since Sarah did not respond well to abrupt adults. I shared my despair with a good friend of mine; I had a good cry.

"I feel like a fly on the wall," Sarah stated. Restricted thinking, an unresponsive environment, and social isolation

had taken its toll. Under the circumstances, I believed depression was inevitable.

A Word on Professional Assistance

At the time Sarah entered therapy she still respectfully vocalized the inconsistencies she observed: among family members, our parenting versus the parenting of her friends, peer interactions, as well as teachers' methods of instruction.

The therapist felt strongly that due to Sarah's expressiveness and maturity, though only 14, she should be seen alone without a parent present. Communication regarding our daughter's progress and the manner in which issues were addressed was spotty at best. Before long, our daughter became increasingly inexpressive and hostile at home. She scrutinized and criticized family members and loudly resisted authority. Her frustration and impulsivity increased when there was conflict with peers at school or she did not get her way at home.

The headway we made at home appeared undone after each visit with the therapist. I finally realized that reflective, talk therapy served to only further increase our daughter's anxiety and frustration. We ended sessions after Sarah made a series of poor personal choices within one week and had little idea why. Upon parting, the therapist said she had empowered Sarah too much. We believe she had unintentionally enabled Sarah's negative behaviors, diminishing our authority and her emotional bond with family members. Much later I asked my daughter if the therapy had helped her and she replied "No."

I prefer an educational approach; Sarah was seeking solutions. We stepped up our efforts, continuing to draw upon her amazing problem-solving abilities. Pleasant past experiences and a close family provided her with resiliency, which was key to her recovery.

My greatest fear was that resulting negative behaviors might be carried into adulthood: namely, resistance to authority, conflict avoidance, a lack of awareness of her impact on others, and withdrawal under stress. She had built a "bubble" around herself—insulating her expressiveness, sensitivity, and warmth—as protection against the teasing, rejection, and overall unresponsiveness of the environment.

"The Art of Listening"

Sarah's short statements were often the most revealing of her inner turmoil and unmet needs. Self-discovery and growth are solitary and often painful processes, and they take great patience on the part of the parent. We allowed these statements and others to guide us in assisting her on her timetable, preserving her independence.

"Why do people speak to each other so harshly?"
"The teacher is always screaming."
"Can you give me extra spelling words?"
1994, 4th grade

"Mom, for some reason I don't seem to be connecting with the kids at school."
1996, 7th grade

"I often 'dip down' so I can have friends."
"I feel so controlled; this school feels like a prison."
"There is no respect for individuality."
1998, end of 8th grade

"I'm struggling. I feel like I'm suffocating."
"Grandpa, I think the high school will open up more opportunities for me."
Summer 1999, upon entrance to 9th grade

"How would you feel if all you did was deal with clueless kids all day long?"
"I think one way, but I feel another way."
"I surround myself with a bubble."
"I'm not making good choices for myself lately."
"My strengths are a curse."
1999, 9th grade

"This is the first year I have ever felt challenged at school."
"The kids don't have the same experiences that I have. Where are all the kids like me?"
"It's hard, I'm lonely, but it is better to be who I am."
"Thank you for sticking by me and helping me be the best I can be."
2000, 10th grade

Growth Takes Great Patience

Sarah's depression, like mine, occurred when she was in a situation beyond her control where there was no apparent solution or escape. She and I both share a strong sense of self, an easy temperament, and are capable of handling many tasks at one time. Our "go with the flow" temperament along with great empathy made each of us susceptible to

(continued on page 12)

(continued from page 11)

depression. The warning signals that indicate when well-being is threatened are often ignored or suppressed.

I personally avoided a depression by transferring to a private high school that met my needs; however, the "inevitable" arrived with a brief depressive episode in my early twenties, never to be repeated. Sarah was aware of this. "I might as well learn now," she stated.

To begin, we assisted our daughter with recognizing signals and discovering positive ways to temper her sensitivity so she did not have to surround herself with a "bubble." Her initial efforts were rewarding, opening the door once more for independent development of additional positive strategies. We assisted her with identification of gifts and balancing her strengths so they did not become weaknesses. Current district leadership has also permitted flexibility in her coursework to ensure intellectual stimulation, and implemented initiatives within the school to promote a respectful learning environment. I feel confident future depression for Sarah is highly unlikely.

Parental Involvement: Assisting Sarah in Discovering "Why"

Reducing anxiety and stress:

- A required 2-week period of reflection to diminish the bombardment of incoming information and inconsistencies. This brought the structure and quiet needed to rejuvenate and clarify thinking. Reintroduction of stimuli was gradual in order for Sarah to learn how to compartmentalize information. Academics were a lifeline and "de-schooling" would have been detrimental. She attended school, but we limited peer contact to 30 minutes on the phone, and no Internet except for school projects. Interestingly, she did not use the phone nor did she use the computer.
- During anxious and inexpressive periods, I maintained contact through physical touch—backrubs, hugs, etc.—allowing my daughter to initiate any conversation. Sometimes it became hard for me not to initiate conversation, but I did my best.
- Once de-stressed, she was asked to think about those things in all areas of her life that did not appear to be working for her.

Recognizing signals for emotional self-regulation:

- Sarah admitted she often ignored her intuition. We worked on listening to "gut feel" as it is an early warning sign of possible "flooding" as well as those situations academically or emotionally that could potentially create frustration or anxiety. Warning signs are indications that well-being could potentially be threatened.
- The "red flag alert." When Sarah appeared disorganized or emotional, I pointed this out as a warning sign that required an "attitude adjustment" (self-adjustment to her reaction) or that she needed to kick in her problem-solving abilities to create options. Verbal expression and sharing a concern was encouraged, but to preserve her independence Sarah had the freedom to privately weigh possible factors and make that decision for herself. She now calls her own "red flag alert" and asks for our assistance only when she is unsuccessful in resolving something on her own.
- Right to privacy was maintained.
- We promoted sensible exercise and healthy eating habits.
- I suggested ways to alleviate stress, but allowed Sarah to discover the methods that worked best for her: favorites included quiet time or a nap, music, reading, a warm bath, backrubs. She requires solitude each day.

Finding a passion:

- As she had withdrawn from activities, we required that Sarah choose one activity of interest to pursue. Her first activity was rather solitary: music lessons. After a few months she switched to horseback riding, and has since found camaraderie with others who share her love of the sport.
- Sarah expressed mathematics was important to her, so we located a mentor—a successful gifted woman—who takes her beyond classroom work. They have a healthy bond that is rewarding for each.

Identifying gifts:

- Intellectual and personality characteristics are called "strengths," not gifts. Her strengths were often misunderstood and perceived as weaknesses by educators less secure in their teaching or staff lacking knowledge of GT characteristics. Also, those outside the family were often too demanding and very hard on our daughter due to her advanced abilities. I asked my daughter for an assessment and politely reminded instructors of her age if she felt they were too demanding.
- I used expressions from literature that indicated what Sarah experienced was not uncommon for creative, bright individuals. One of my favorite expressions is Goethe's "Everything in moderation," and several passages found in *Letters to a Young Poet* by Rainer Maria Rilke, which I read to her.
- Sarah reads books focused on the motivation behind an individual's behavior.

- We respectfully pointed out those individuals, family members and extended family who appeared to manage their strengths successfully and unsuccessfully to assist with self-identification and balance.
- We share with Sarah the difficulties our strengths created for us growing up and the resulting behavior patterns we struggle with as adults.

Learning to grab the riches and manage conflict:

- We used daily experiences, positive and negative, to brainstorm and practice problem-solving. We suggested the selective use of humor on occasion to defuse a tense situation.
- Sarah began to feel less restricted by looking at various options, regaining a sense of control over her life. Finding options in a restrictive environment is challenging, but can be done with parental assistance.
- Discussions surrounding her choices that might be considered "bad judgment" focused instead on "good choices based upon fulfilling those needs she deemed important."
- It has been a tremendous help that new district leadership is validating and systematically addressing many of the concerns Sarah voiced over the years. We openly discuss the limitations of the school and the community, but focus on the positive improvements we each observe.
- Sarah is accepting and working within limitations, and has become involved in a task force created to promote respect, and recognize student and staff achievements within her school. She is positively channeling her strengths, particularly her great empathy for others, through volunteerism.

Accepting strengths:

- Self-acceptance is evident when laughter and well-being returns.

References

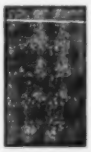
Rilke, R. M. (2000). *Letters to a young poet* (J. Burnham, Trans.). Bradford, England: New World Library.

Author's Note

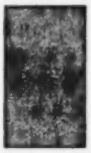
I would like to thank Gail Larsen for her support and compassion as we talked about talents and gifts of our daughters.

3 New Practitioners' Guides from the NRC/GT

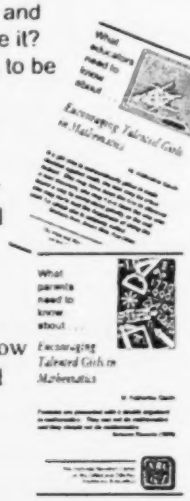
Why is there a gender gap in science and technology and how can we reduce it?
How can we can empower gifted girls to be more confident in mathematics?
Find out more from our Practitioners' Guides on mathematics.



What Parents Need to Know About Encouraging Talented Girls in Mathematics
M. Katherine Gavin
Order No. A0021

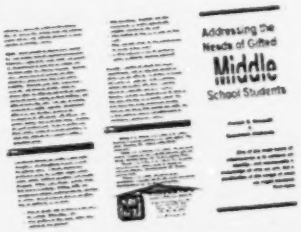


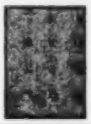
What Educators Need to Know About Encouraging Talented Girls in Mathematics
M. Katherine Gavin
Order No. A0022



• • •

How can middle schools adopt the Schoolwide Enrichment Model (SEM) to infuse a broad range of highly challenging learning experiences into their programs?
Find out more from this Practitioners' Guide.





Addressing the Needs of Gifted Middle School Students
Joseph S. Renzulli & Susannah Richards
Order No. A0023

Send your order to: Order Department
The National Research Center on the Gifted and Talented
University of Connecticut • 2131 Hillside Road Unit 3007 • Storrs, CT 06269-3007

Make checks payable to the University of Connecticut.
Sorry, no credit card orders.
Note: Publications are distributed on a cost recovery (i.e., non-profit) basis only.

Pricing of Practitioners' Guides:
(50¢ each; 100 – $25; 250 – $50; 500 – $75; over 500 – 15¢ each)

Extending Gifted Education Pedagogy to the Regular Classroom

M. Sue Whitlock
School District of Upper Dublin
Dresher, PA
E. Jean Gubbins
University of Connecticut
Storrs, CT

The mission of The National Research Center on the Gifted and Talented (NRC/GT) is to plan and conduct a program of high quality research that is theory-driven, problem-based, practice-relevant, and consumer-oriented. An examination of professional development practices in gifted education is a component of the mission of the NRC/GT. A recently completed study, *Extending Gifted Education Pedagogy to the Regular Classroom,* was designed to investigate the impact of various professional development activities on educators' practices. Districts involved in the study had to provide a local liaison who had gifted and talented responsibilities and at least five teachers within one building who would agree to participate in the study for 2 years. The teachers had to implement at least one new differentiation practice in their classrooms and provide requested documentation. Over 30 school districts throughout the United States were selected to participate.

Teachers were introduced to each of the following strategies in the study:

1. Modification—using an existing curriculum unit
2. Differentiation—using open-ended activities
3. Differentiation—using alternative activities
4. Differentiation—using tiered activities
5. Enrichment—using curriculum compacting and interest-based curriculum activities for some students
6. Enrichment—using the Enrichment Triad Model in the classroom for all students

The School District of Upper Dublin, located in a suburban area northwest of Philadelphia, was involved in the study. The gifted support supervisor acted as the liaison and trainer for five middle school teachers. The teachers' class assignments included two regular classroom teachers, two learning support teachers, and one gifted support teacher. In February 1998, the liaison presented a professional development module on modification, differentiation, and enrichment strategies to the teachers during a 5-hour workshop. That day the teachers developed an understanding of the research questions and received extensive information about the strategies from which they could choose. The group considered what available strategies they already had in their classrooms and selected the new strategy they wanted to add to their repertoire of resources. They attempted to identify what support they would need to implement the strategy.

The five teachers decided to work on the same strategy, a differentiation strategy that would provide alternative activities for the students in their classes. They appeared to have two reasons for choosing the same strategy. They could support each other in their efforts and the strategy seemed needed throughout their curriculum.

For the time of the study, the entire group met at least once a month for an hour or more to continue training on identified areas of interest or need in relation to the study. The meetings made use of the many training materials provided by the NRC/GT, as well as the various materials developed by Carol Ann Tomlinson for the Association for Supervision and Curriculum Development (ASCD).

Additionally, the teachers met informally to discuss aspects of their work either among themselves or with the liaison. The liaison also went into several classrooms and observed the students or helped the teacher with an activity.

The teachers recognized early in the first year that although they had selected one strategy for the study, they needed the other strategies as well. Before long they were working on modifying units and trying other ways of differentiating. As

Curriculum Modification...

involves the analysis, evaluation, and improvement of existing curriculum units and lesson plans. Modified units increase challenge, authenticity, and active learning to improve learning and achievement.

Curriculum Differentiation...

is a process teachers use to enhance learning to improve the match between the learner's unique characteristics and various curriculum components. Differentiation involves making changes in the depth or breadth of student learning. Differentiation is enhanced with the use of appropriate classroom management, varied pedagogy, pretesting, flexible small groups, access to support personnel, and the availability of appropriate resources.

Enrichment...

—Implement curriculum compacting for some students using student-selected, interest-based activities from the Schoolwide Enrichment Triad Model.

—Provide enrichment for all students using the Schoolwide Enrichment Triad Model to enrich all students' academic experiences and provide differentiated opportunities to some students.

the second year began, the liaison became very aware of her need to differentiate for each of the study participants, since they were at different levels of expertise. Two still wanted to refine the chosen strategy and the others were eager to try to add more complexity to the activities.

As the study came to a close, the participants realized that what they had mastered represents a starting point for what they still want to do. They had worked hard to master one strategy but recognized a need to continue to work on other strategies. Three of the five members have continued to read work about differentiation and are sharing their resources with others. There have been comments from several of them that this long-term opportunity should be available to others on the staff as well. It is the intent of the liaison to work with the staff development director to consider frameworks for offering this training to other interested staff in the future.

Quotes From Study Participants

"As a result of using differentiation strategies in my classroom, I have seen a rise in student enthusiasm and student involvement that directly correlates to the choices a student can make."

"There are unexpected benefits to this study. I am writing out lessons in a more organized way and putting a better structure to what I do."

"Differentiation has given my students a sense of empowerment that they were not used to, or even knew they had."

"My greatest success in using differentiation was to watch my students take charge of their learning."

"Pre-assessment has become a way of life for me. It is so much easier to identify my students' needs through the use of this tool."

"I have changed my way of thinking in relation to planning lessons, pretesting, and how I approach projects."

BEST COPY AVAILABLE

Editors:

E. Jean Gubbins

Del Siegle

Editorial Board:

Heather Spottiswoode

Judith Mathews

Lisa Muller

Siamak Vahidi

Joseph S. Renzulli

The *NRC/GT Newsletter* is published by The National Research Center on the Gifted and Talented, University of Connecticut. The Research Center is supported under the Educational Research and Development Centers Program, PR/Award Number R206R000001, as administered by the Office of Educational Research and Improvement (OERI), U. S. Department of Education.

The findings and opinions expressed in this newsletter do not reflect the position or policies of the National Institute on the Education of At-Risk Students, the Office of Educational Research and Improvement, or the U. S. Department of Education.

Please send change of address notification to the NRC/GT Mailing List at the address below or via e-mail to epsadm06@uconnvm.uconn.edu. Phone (860-486-4676) FAX (860-486-2900) Internet (www.gifted.uconn.edu).

Articles in this newsletter may be reproduced. All reproductions should include the following statement: *This article has been reproduced with the permission of The National Research Center on the Gifted and Talented.*

If articles in this newsletter are reprinted in other publications, please forward a copy of the publication to the address below.

NRC G/T

University of Connecticut

University of Virginia

Yale University

University of Connecticut
The National Research Center on the Gifted and Talented
2131 Hillside Road Unit 3007
Storrs, CT 06269-3007

NON-PROFIT ORG.
U. S. POSTAGE
PAID
STORRS, CT
PERMIT NO. 3

BEST COPY AVAILABLE

THE National Research Center on the Gifted and Talented NEWSLETTER

NRC G/T

Fall 2001

Inside

NRC/GT Looks at Responses ..... page 1
NRC/GT Proposal Abstracts ..... page 5
Effective Coaching ..... page 11
Past Five Years' Work ..... page 15

NRC/GT Looks at Responses: You're Having a Test!

E. Jean Gubbins
University of Connecticut
Storrs, CT

You're having a test tomorrow! When was the last time you heard or actually said this statement? How did you respond? Excited! Panicked! Disinterested! Motivated! Perhaps you need more information, such as: What subject? What type of test? How long will it be? Does it count toward my final grade? Depending on the answers to these questions and others, your motivation or anxiety may increase or decrease. Your past experience with tests may influence your reactions to a great extent. Did the awareness of a test on a certain date help you focus your learning or, at the last minute, get ready for cramming?

You may react to tests in many different ways—as a challenge or a nightmare. In reality, tests are to inform you, your teachers, your parents, your administrators, and your community. Information resulting from tests should guide content and instruction, rather than just something that happens after a specific number of weeks pass by in classrooms around the country.

Through our research at The National Research Center on the Gifted and Talented (NRC/GT), we have learned a lot about how tests are used in classrooms. Of course, our findings and conclusions take on different perspectives, depending on the types and purposes of tests. For this article, a narrow perspective on achievement tests is offered: group assessment consisting of objective, close-ended items focusing on a specific set of content objectives. Essentially, test items are constructed in response to an overarching question: What do you know? There is no attempt to find out how you know this information, how you can possibly demonstrate your knowledge in alternative formats, or how you can apply this content knowledge to similar or novel problems or situations.

There are numerous books to consult about the history and dynamics of testing (cf. Elmore & Rothman, 1999; Lyman, 1998). Some are very technical; others are step-by-step approaches to designing tests that measure students' content knowledge. Books explore the world of testing as a science and an art. Tests and subsequent test scores grab people's attention. When someone states test results, he/she sounds authoritative. There is an instant acceptance of the data as truth. Test development is a serious business. Some people embrace tests as an objective measure in response to a basic question: How are we doing? Others view tests as an intrusion on the true meaning of learning that goes beyond mastery of content knowledge. There are probably more viewpoints about testing than books about designing tests.

One viewpoint about tests is from a children's book. Children's book authors often capture the meaning behind situations, issues, or problems in such a clear, consistent way because they are writing for and appealing to young people. Their stories and messages don't escape the adult mind. However, the stories may escape us because of lack of access.

How often do you read children's books?

☐ frequently ☐ sometimes ☐ infrequently ☐ never

If you selected "never" in response to the test question above, then you may have missed a wonderful interpretation of the impact of tests from one of the wisest children's authors and unproclaimed philosopher—Dr. Seuss. Knowledge, sentiment, understanding, and celebration come together in *Dr. Seuss Hooray for Diffendoofer Day!* (Seuss, Prelutsky, & Smith 1998). Read the final section of this book first. It is customary for authors to explain why they wrote the book and then acknowledge people who supported the process and made it possible to share it with others. This information is usually part of the preface. *Hooray for Diffendoofer Day!* turns the protocol of the book world topsy-turvey. After the story is a section entitled: "How this book came to be." The basis for this book was a creative idea sketched out by Dr. Seuss's many musings as he played with words, titles, and drawings of people and places. You

(continued on page 2)

EC 309140

(continued from page 1)

have an opportunity to trace his thoughts and ideas and witness the brainstorming process in which he engaged alone in his studio. Years went by and the potential book idea was referred to infrequently. Unfortunately, the book never reached completion during Dr. Seuss's lifetime. However, the treasure trove of ideas and illustrations did not remain hidden from all. With the support of his former editor and Alfred A. Knopf, Inc., two dedicated professionals completed the book or as the book jacket states—Dr. Seuss with the help of Jack Prelutsky and Lane Smith. The team of Prelutsky & Smith consists of a famous children's author and illustrator, respectively. They honored Dr. Seuss by completing this book. In a way, they, too, had to "pass the test" of bringing Dr. Seuss's musings and drawings to life and casting a story with meaning beyond words set in print.

Three short sections of *Hooray for Diffendoofer Day*! present a view of tests at Diffendoofer School that may ring true in your school:

> We also have a principal,
> His name is Mr. Lowe.
> He is the very saddest man
> That any of us know.
> He mumbles, Are they learning
> This and that and such and such?
> His face is wrinkled as a prune
> From worrying so much.

Later in the book Mr. Lowe announces:

> "All schools for miles and miles around
> Must take a special test,
> To see who's learning such and such—
> To see which school's the best.
> If our small school does not do well,
> Then it will be torn down,
> And you will have to go to school
> In dreary Flobbertown."

Of course, students took the test and they all waited for the results:

> One week later, after recess,
> Mr. Lowe meandered in.
> We'd never seen him smile before,
> But now he wore a grin.
>
> He soon began to giggle,
> Then his giggle grew by half,
> And then it really happened—
> Mr. Lowe began to laugh.
>
> "You've saved our school!
> You've saved our school!"
> He jubilantly roared.
> "We got the very highest score!"
> He wrote it on the board.

Obviously, all of the students in Dr. Seuss's book had perfect scores. Such is the reality of endings in some children's book.

Returning to the reality of school in 2001, we know that tests can be very useful in determining mastery of curriculum, assessing student progress over time, maintaining a system of accountability, and providing one view of performance. We must know why we are testing students, how we are testing students, and what we are going do with the resulting data.

Testing for Mastery of Content and Skills

In the NRC/GT research protocols, we use tests in multiple ways. Depending on the particular study, we may want an "insurance policy." For example, we know that many gifted and talented students have actually mastered the curriculum planned for their grade level prior to the first day of school. Does that sound impossible? In our study of curriculum compacting (Reis et al., 1993), we found that high ability students (grades 2-6) mastered 40-50% of the traditional classroom material in one or more of the following subjects: mathematics, language arts, science, and social studies. Try it yourself. Ask last year's elementary teachers to give you the names of the top 3 students in reading, spelling, or mathematics. Select a test that you would normally use at the end of the school year or choose a unit test from your teacher's manual. Administer the test to the top 3 students and determine the extent to which they know and understand the content.

This curriculum "insurance policy" is the documentation of what the children know. Obviously, we would not want to eliminate or streamline curriculum if the student could not prove mastery of specific grade level objectives. A profile of what children know allows us the luxury of considering what they want to know and, possibly, how they want to learn the new information and skills (Starko, 1986). Students may work with the next level of complexity in a specific content area or use their current content and skill mastery to extend learning across disciplines. For example, one second grade student was particularly adept at poetry writing. She created poems using many styles and formats. Her choice of topics was also wide ranging. She captured the essence of language and enjoyed sharing poems with others. To further the development of her poetry skills, she worked with a local poet. With a mentor, this young person escalated her writing ability as a poet and started working on developing original plays. Her language arts time was adjusted to meet her

learning needs. She and her mentor worked together twice a week during language arts. Periodically, this student's skills were checked with readily available unit tests to ensure that she continued to know, understand, and use grade level and above grade level skills to a high level of accuracy. With these assurances of the mastery of content and skills, the classroom teacher completely supported the elimination of grade level curriculum in language arts on a unit-by-unit basis for this young person.

Testing for Growth Over Time

When we studied the impact of programming for gifted and talented students (grades 2-3), cognitive and affective variables were of interest. In the quantitative study of learning outcomes, Delcourt, Loyd, Cornell, and Goldberg (1994) used achievement tests to look at the cognitive gains of programming using various service delivery models: special class, special school, pull-out program, and within-class program. We administered pre-post, standardized, norm-referenced tests for 2 years in mathematics, reading, science, and social studies to determine growth over time. We considered using tests that were one grade level above the students' current grade assignment. We experimented with a small group of students and found that out-of-level testing was not necessary for this age group.

Have you ever considered using out-of-level tests? Out-of-level tests will allow you to assess content mastery over time without encountering ceiling effects (i.e., students scoring at or near the 99th percentile on the pretest). You will learn what students do not know. You can document the challenge level of curriculum in your classroom, school, or district. If you currently use a pull-out program for several hours a week, you can also determine the extent to which time away from the regular education classroom affects mastery of concepts or principles. To what extent are students maintaining and enhancing their advanced-level skills?

Educators, parents, researchers, students, and the community at large want to be informed about students' progress in the local schools. How are our students doing? Test data should serve various audiences. Resulting data aids decision-making about curriculum, instruction, and educational resources. Of course, test data over time is just part of the overall picture of how content, skills, and pedagogy come together in the learning process. Understanding the level of students' daily performance is critical to planning and maintaining a strong focus on curriculum.

Testing for Accountability

Educators, policy makers, and parents view tests as accountability measures. "Tests of student achievement that can be widely and uniformly administered across schools are the key mechanism by which policy makers hold schools accountable" (Donovan, Bransford, & Pellegrino, 1999, p. 54). Tests often serve as the barometer of local education achievements. School, district, and state reports provide considerable data about progress towards content standards or the percentage of students achieving at high, average, or low levels. Data may be portrayed over several years to show trend lines. At a glance, such portrayals provide information about preset goals. We have considerable experience in measuring factual knowledge and using objective scoring. We often make comparisons of the individual to a larger group of test takers of a similar age or grade.

As accountability measures, achievement tests must be selected based on their connection to the curriculum. To what extent does the scope and sequence outlined in your textbooks reflect the skills assessed on your school, district, or state level tests? Do the objectives of your curriculum reflect content standards in language arts, reading, science, mathematics, history, geography, or the arts? Are you measuring what is actually taught?

Given the availability of content standards developed by various professional organizations, it is easy to review the connections between curriculum and assessment. Note that it is curriculum *and* assessment, not curriculum then assessment. These processes are inextricably linked. As Elmore and Rothman (1999) state "the key is transparency" (p. 3). Administrators, teachers, students, parents, policy makers, and the community-at-large must know what is expected as outcomes of education, how outcomes will be measured, and how results will provide guidance about future learning opportunities. We must

> . . . make explicit the link between standards, assessments, accountability, *instruction*, {italics in the original} and learning. (Elmore & Rothman, 1999, p. 3)

Testing and Performance

The limited definition of tests offered above is not the only source of knowledge gained about student progress and instructional techniques. Our understanding of how people learn and how they transfer their learning is still unfolding. We are also very interested in deep understanding rather than surface, factual knowledge (Donovan, Bransford, & Pellegrino, 1999). We are gaining more and more expertise in measuring the depth of understanding. Newmann and Associates (cited in Elmore & Rothman, 1999) propose an emphasis on authentic pedagogy. They delineate four standards:

> Higher-Order Thinking. Instruction involves students in manipulating information and ideas by synthesizing, generalizing, explaining, hypothesizing, or arriving at

(continued on page 4)

(continued from page 3)

conclusions that produce new meaning and understandings for them.

Deep Knowledge. Instruction addresses central idea of a topic or discipline with enough thoroughness to explain connections and relations and to produce relatively complex understandings.

Substantive Conversation. Students engage in extended conversational exchanges with the teacher or their peers about subject matter in a way that builds an improved and shared understanding of ideas or topics.

Connections to the World Beyond the Classroom. Students make connections between substantive knowledge and either public problems or personal experiences. (Elmore & Rothman, 1999, p. 75)

These four standards seem to be a good blueprint for thinking about the curriculum and assessment connections. They reflect and integrate viewpoints about testing:

Testing for Mastery of Content and Skills
Testing for Growth Over Time
Testing for Accountability
Testing and Performance

You're having a test! The next time you say or hear this statement, ask yourself some critical questions about the purpose of the test, the scope of the questions, and how you will use the resulting data to improve the curriculum, change instructional techniques, or examine the strengths and abilities of your students.

References

Delcourt, M. A. B., Loyd, B. H., Cornell, D. G., & Goldberg, M. D. (1994). *Evaluation of the effects of programming arrangements on student learning outcomes* (RM94108). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (1999). *How people learn: Bridging research and practice.* Washington, DC: National Research Council.

Elmore, R. F., & Rothman, R. (Eds.). (1999). *Testing, teaching, and learning: A guide for states and school districts.* Washington, DC: Academy Press.

Lyman, H. B. (1998). *Test scores and what they mean* (6th ed.). Boston: Allyn and Bacon.

Reis, S. M., Westberg, K. L., Kuilkowich, J., Caillard, F., Hébert, T., Plucker, J., Purcell, J. H., Rogers, J. B., & Smist, J. M. (1993). *Why not let high ability students start school in January? The curriculum compacting study* (Research Monograph 93106). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

Starko, A. J. (1986). *It's about time: Inservice strategies for curriculum compacting.* Mansfield Center, CT: Creative Learning Press.

Seuss, T., Prelutsky., J., & Smith, L. (1998). *Hooray for Diffendoofer day*! New York: Alfred A. Knopf.

- *What is ADHD?*
- *What causes ADHD?*
- *How is ADHD assessed and diagnosed?*
- *ADHD or gifted: Either or both?*
- *Is ADHD included in special education laws?*
- *ADHD and giftedness: Where do we go from here?*

Attention Deficit Disorders and Gifted Students: What Do We Really Know?

Dr. Felice Kaufmann
Dr. M. Layne Kalbfleisch
Dr. F. Xavier Castellanos

Learn more about ADHD and gifted students from medical and educational perspectives.

Order No. RM00146 ..... $15.00

Contact: Order Department
The National Research Center on the Gifted and Talented
University of Connecticut
2131 Hillside Road Unit 3007
Storrs, CT 06269-3007

Make checks payable to:
University of Connecticut

NRC G/T

Publications are printed on a cost recovery (i.e., non-profit) basis only.
All papers distributed by the NRC/GT may be reproduced by purchasers.

The National Research Center on the Gifted and Talented

Since 1990, The National Research Center on the Gifted and Talented has carried out the research and development priorities established under the Jacob K. Javits Gifted and Talented Education Program. The Javits Act gives highest priority to identifying and serving high potential students who may not be identified through traditional assessment criteria, including individuals of limited English proficiency, individuals with disabilities, and individuals from economically disadvantaged groups. Theory-based models of identification, alternative assessment, programming, evaluation, professional development, curriculum, and intelligence have been the hallmarks of our quantitative and qualitative research portfolio from 1990 to 2000. In addition, the United States Department of Education, Office of Educational Research and Improvement has recognized our Center's dissemination plan for its effectiveness and comprehensiveness.

The National Research Center on the Gifted and Talented (NRC/GT) (2000-2005) is a consortium of 3 Core Universities (Connecticut, Virginia, and Yale). Our current research agenda centers on the theme, Transitions From Potential-to-Performance and addresses research questions such as the following:

1. Are the personality and behavioral characteristics of gifted underachievers more similar to those of underachievers of average ability levels, achievers of average ability levels, or with achievers of high ability levels?
2. To what extent can teachers modify reading practices and curriculum for above average reading students in regular classroom settings?
3. What variables predict high achievement on international assessments of mathematics and science?
4. What are the effects of state testing on schools and teachers relative to curriculum and instruction?
5. What is the degree of consistency between teachers' philosophies about giftedness and classroom practices?
6. What is the impact of differentiation of curriculum and instruction on students from disadvantaged backgrounds and/or students from some minority groups?
7. To what extent will creative and practical abilities be of increasing importance to giftedness, with increasing age and across domains?

In addition to the Core Universities, Senior Scholars at Collaborating Universities have made a commitment to research projects and research-based monographs related to the priorities of the Javits Act.

Our research agenda resulted from a recent needs assessment from educators, policy makers, and the general public. Our agenda is responsive to the Javits legislation. We continue to:

- investigate the causes for disparity in achievement at the highest levels of performance among various racial and ethnic groups;
- study models for increasing the proportion of underrepresented students performing at the highest levels; and
- generate findings and applications that build the capacity of teachers and schools to improve the performance of underrepresented students.

The NRC/GT is committed to high quality research that is problem-based, practice-relevant, and consumer oriented. Finding answers to questions using appropriate quantitative and qualitative methodologies will only impact educational practices and policies if the information is available to target audiences in multiple formats. Therefore, we continue to use the most effective dissemination practices to ensure accessibility of research findings to improve our Nation's schools.

The following abstracts provide an overview of the NRC/GT research studies:

An Investigation of Interventions for Promoting the Achievement of Low SES and Culturally Diverse Gifted Middle School Students

Del Siegle
Sally M. Reis
D. Betsy McCoach
University of Connecticut

The underachievement of gifted students represents a loss of valuable human resources for the nation, as well as unrealized fulfillment for the individual. Although a previous NRC/GT needs assessment found that the issue of underachievement is foremost in the minds of practitioners, no national study has focused on interventions for reversing the underachievement of gifted students. For the purpose of this study, we define achieving gifted students as students who perform at or above grade level in reading and math on standardized achievement tests in mathematics and reading. We are selecting a sample of urban and rural school districts

(continued on page 6)

BEST COPY AVAILABLE

(continued from page 5)

with culturally and linguistically diverse students (Black, Hispanic, and Native American) and students from economically disadvantaged settings. We are focusing our study on middle school students who perform at grade level or above grade level in reading or mathematics from various racial/ethnic groups or economically disadvantaged homes and settings.

Phase one was a review of the literature on this topic with an emphasis on the achievement patterns of minority students. We sought to better understand the achievement patterns of successful students from various racial/ethnic groups. We are analyzing data from the National Education Longitudinal Study (NELS-88) to determine course-taking patterns, results of content area achievement tests, school characteristics, and grades among various racial and ethnic groups; and analyzing data from the Early Childhood Longitudinal Study- Kindergarten Cohort (ECLS-K) databases to determine the characteristics of home and school environments that promote the academic achievement patterns of young children. After identifying successful programs through vehicles such as the National Center for Education Statistics (NCES), we are collecting data through document analysis, interviews, observations, questionnaires, or surveys. The following research questions guide our data collection. What teaching strategies promote achievement in schools where reform movements have been successful? What are the achievement patterns of minority students at risk of school failure? How do interactions between teachers and learners promote achievement? How do school/parent partnerships promote achievement? Do the attitudes of community persons affect the achievement of students? We will also study family patterns (e.g., reading to children, visiting local places of interest, telling stories, playing games) that affect their children's school readiness.

In Phase Two, we investigate different intervention approaches designed to promote the mathematics or language arts/reading achievement of gifted students using one or more of the following interventions: (1) interest-based projects and classroom modifications, (2) self-regulation strategies for students, (3) self-efficacy strategies, and (4) student goal setting and modifying environmental perceptions. We believe that one or more interventions will improve school grades for the subject area in which the student had been identified as underachieving. Development and field-testing of the interventions is underway.

We are seeking classroom teachers and teachers of gifted who would be interested in working with one or two bright, underachieving students to implement one of the treatments in their classrooms. The study would begin in October 2002 and end in April 2003. Participating teachers would also agree to collect a minimum amount of follow-up data during the 2003-2004 school year. Interested parties should contact our office at 860-486-4678 for more information.

Increasing Achievement and Enjoyment in Reading: The Schoolwide Enrichment Reading Framework

Joseph Renzulli
Sally M. Reis
E. Jean Gubbins
Del Siegle
University of Connecticut

This proposed 3-year research study complements our other proposed investigation of achievement, builds upon previous studies conducted by the UConn site of the NRC/GT, and relates to our theme of transitions from potential to performance. We are studying reading achievement in students of all achievement levels at the upper elementary and middle school levels.

The first phase of this study is an analysis of early readers through the use of the ECLS-K data documenting the wide range of skills and readiness with which children enter kindergarten. This preliminary research indicates that the level of children's skills at kindergarten entry appears to be related to parental educational status, as children whose mothers are well educated come to kindergarten with more academic skills, such as recognizing letters, beginning sounds, and reading storybooks.

This secondary analysis of the ECLS-K database examines a nationally representative sample of 22,000 first-time kindergarten students in approximately 1,000 kindergarten programs throughout the United States. Specifically, multilevel modeling techniques will be used to identify teacher-level and school-level contextual variables that appear to promote academic excellence. To ascertain how these variables contribute to the acceleration or deceleration of individual academic growth trajectories during primary grades, we will follow the growth of students throughout kindergarten and first grade, paying particular attention to reading skills and increasing achievement in reading.

We are conducting school and classroom visits to study programming for talented readers in urban and suburban elementary and middle schools. We are studying such areas as: whether regular curriculum reading practices are enriched, whether acceleration is in use, the reading practices in selected classrooms, the available resources for talented readers, and the nature of the reading program currently in use for talented readers.

In the second phase of the study, the Schoolwide Enrichment Model (SEM) will be used as a vehicle to increase both reading achievement and enjoyment in reading. The SEM

seeks to develop talents in all children and encourage enjoyment in learning with the use of three components: the Total Talent Portfolio, curriculum differentiation techniques, and opportunities for enrichment teaching and learning for students in areas of advanced ability and interest.

We will apply the SEM philosophy to reading instruction in several school districts to develop a SEM Reading Framework. We will compare the reading achievement of students of various reading achievement levels with a comparison cohort of students using traditional reading programs in districts with diverse student populations and schools. This mixed methods design uses quantitative methods for the database analyses and to study differences in reading achievement and enjoyment of reading before and after the SEM Reading Framework intervention. Qualitative methods will be used to enhance quantitative data collected about enjoyment of reading and types of independent reading pursued both in and out of school.

Advanced Placement and the International Baccalaureate Programs: Factors Enhancing or Inhibiting Student Enrollment and Achievement Across Racial, Socio-economic and Ethnic Populations

Carolyn M. Callahan
Tonya R. Moon
Carol A. Tomlinson
University of Virginia

Little attention has been given to exploring the reasons for the growing achievement gaps between the highest achieving Black and White students at the secondary level. These differences, combined with the poor performance of the most advanced American students in international comparisons—most recently the TIMMS study—suggest a need to closely examine the programs/curricula serving gifted students in secondary schools. First, using the TIMMS data, we will examine student, teacher, and school factors that may predict differential patterns of achievement across racial and ethnic groups. Then we will qualitatively examine the reasons underlying choices made to enroll (or not enroll) in Advanced Placement courses or International Baccalaureate programs by minority students, the match between learners from non-dominant cultures and the curriculum of these programs, and the engagement of learners from differing racial, socio-economic, language, and gender sub-groups enrolled in AP and IB courses. We will examine, in particular, recruitment strategies, instructional strategies or curricular adaptations that engage minority and impoverished learners in these advanced curricular options, the ways in which classroom or school climate affect the decisions made by students, and any other themes that emerge from interviews and observations.

State Standardized Testing Programs: Their Effects on Teachers and Students

Tonya R. Moon
Carolyn M. Callahan
Carol A. Tomlinson
University of Virginia

Until the late 1970s, standardized testing had little effect on instruction. However, since the minimum competency movement of the 1970s, the importance placed on standardized tests has increased. The central theme of this reform effort is the need to raise academic achievement of all learners. The intent of this study is twofold: (1) to investigate the impact, if any, of state testing initiatives on the potential for challenging instruction for all students, including gifted students, economically disadvantaged students, limited-English proficient students, and students with disabilities, and (2) to investigate the impact, if any, from the teachers' and students' perspectives of the state testing initiatives on all students (including high performing minority students). Specifically, the study seeks to determine through quantitative and qualitative methodologies, teacher and student factors that encourage and/or discourage complex and in-depth learning.

Multiple Case Studies of Teachers and Classrooms Demonstrating Competent Application of Principles of Differentiated Instruction to Address Academic Diversity

Carol A. Tomlinson
Carolyn M. Callahan
University of Virginia

In recent years, there has been a burgeoning interest in creating classroom settings attentive to student variation in readiness, interest, and learning profile rather than assuming a single approach to teaching and learning serves all students well. This approach, called differentiation of instruction, is still relatively rare in schools. The goal of this project is to develop a series of case studies that describe teachers who are effective in differentiating instruction, thus aiding the transitions of many other educators who seek to make their classrooms more effective learning places for students whose culture, gender, economic status, experience, and talents vary widely. The multiple case design will examine classrooms in three sites in three states involving a range of grade levels from primary through high school. The focus of the case studies is teachers who promote academic success in students with minority and low economic students. The central goal of the study is describing approaches, strategies, and classroom routines that appear to lead to academic success with these learners.

(continued on page 8)

(continued from page 7)

Using Case-Based Instruction to Identify Talent in Primary Grades

Tonya R. Moon
Carolyn M. Callahan
Carol A. Tomlinson
University of Virginia

Primary school is a time of great transitions for learners. Transitions occur when students come from a predominantly unstructured childhood environment into the structured beginnings of primary school. Once in the primary grades, the school experience is largely composed of student-centered and hands-on activities. Students transition from the comfort of this nurturing environment to a more content-driven school experience at 3rd grade, resulting in what is commonly referred to as the 3rd grade slump. During this transition phase, talented students, particularly those from less obvious talent pools, are more likely to fall through the cracks in traditional gifted identification models and programs. It is the intent of this study to work with primary level teachers in changing their instructional practices to be more responsive to the transitions students experience through case methodology resulting in model lessons which can be used for identification purposes.

Transitions in the Development of Giftedness: Main Study

Robert J. Sternberg
Elena L. Grigorenko
Yale University

The purpose of this research is to assess the factors that lead to success in transitions of giftedness. In using the term *giftedness*, we refer to individuals who (a) are excellent in work they can or do produce, (b) possess this excellence relative to peers, (c) are able to display this excellence through some kind of tangible performance, (d) can repeat this performance multiple times, and (e) excel in a way that is societally valued. This definition is based on the confluence model of giftedness. What leads some, but not other people successfully to make these transitions in the kinds of expertise they develop? Is it possible that many underserved minority students have the abilities they will need to succeed at high levels in careers, but never get the chance because the educational system fails to recognize their strengths?

We believe that the problem addressed by this study is one of the most fundamental ones in gifted education, in particular, and in education, in general. The problem is how to optimize on the talent of the nation's youngsters, our most precious resource as a nation. Currently, traditional analytic abilities are stressed in the identification of children for gifted education programs. However, our research suggests that creative and practical skills are as important, if not more important than analytical skills to success in life. We have found that even individuals who are analytically and creatively gifted will not necessarily possess the abilities to excel as adults. For example, they may be able to produce creative artwork but not know how to get it exhibited, or write creative stories but not know how to get them published, or compose creative musical arrangements but not know how to get them played. The may fail in later transitions of giftedness because they are ineffective at promoting their ideas.

We propose specific hypotheses posing testable predictions: creative and practical abilities will become of increasing importance with age and that members of underrepresented minority groups will, on average, score more highly on measures of creative and practical abilities than on measures of analytical abilities. To verify these hypotheses, we are looking at individuals in various life stages, employing cross-sectional methods, and across those same life stages, employing longitudinal methods.

There are two groups of participants: (1) evaluators (teachers, parents, college/university professors and instructors, and supervisors) and (2) evaluatees (students and young professionals). The first group of participants will fill out questionnaires and be interviewed regarding the characteristics of highly gifted, gifted but not highly gifted, and nongifted individuals in their area of endeavor. The second group of participants will be assessed for their potentials and demonstrated levels of performance. Participants will be recruited nationwide. We intend to recruit at least 1600 participants, split evenly between all of the grouping criteria detailed in the following paragraphs.

Evaluated participants will consist of three groups of individuals in each of five life stages: (1) middle-school students; (2) high-school students; (3) college students; (4) advanced graduate students; and (5) young professionals.

Within each group, we plan to adequately represent minority groups. Our design will call for the following breakdown: (1) European-American majority-group students; (2) African-American minority-group students; (3) Hispanic minority-group students; and (4) Asian minority-group students.

Individuals in each age cohort will be divided into three general groups, based on evaluation of their performance as: (1) highly gifted (study group); (2) gifted but not highly gifted (comparison group); and (3) nongifted (control group).

We have chosen two areas of giftedness that can be studied at each of the life epochs described above: (1) verbally

oriented (reading/writing) performance; and (2) quantitatively oriented (mathematical/scientific) performance.

Individuals who are evaluated will be assessed for each of the aspects of a confluence model: (1) successful intelligence; (2) domain-relevant knowledge; (3) thinking styles; (4) personality; (5) motivation; and (6) environment. In addition to quantitative assessments, we plan to use qualitative assessments based on interviews. The results of the measures assessing the skills of evaluated individuals within the confluence framework will be compared with the group classification of these individuals to determine which skills are most important to giftedness within any given group. Although we plan to assess the same attributes across age levels, we recognize the inevitable need for flexibility in the way we assess these attributes.

Transitions in the Development of Giftedness: Musical Talent

Robert J. Sternberg
Elena Grigorenko
Yale University

This study is designed to complement the Main Study in the domain of music performance. We chose this domain because it may enable us to generalize our findings by sampling a domain—the arts—that is missing from the Main Study and because it is a domain where straightforward means are available for evaluating success.

The participants of the study will include three groups: (1) current professional musicians who also teach high ability students in the domain; (2) students who attend the program where these musicians serve as instructors; and (3) music critics from the major media. More specifically, at least 20 teachers and 60 students (20 < age 18; 40 > age 19) will be selected from major music conservatories. Ten students at each instructional level (pre-college, undergraduate, graduate) named by more than one teacher at the school as well as those who are chosen randomly from among unnamed students in the school will be interviewed, and will be administered the personality and motivation inventories employed in the Main Study. As with the Main Study, we plan to recruit participants evenly: (1) European-American majority-group students; (2) African-American minority-group students; (3) Hispanic minority-group students; and (4) Asian minority-group students.

Each of the participants will be interviewed with a structured interview. The purpose of the teacher interview, which will be conducted first, would be to identify the variables associated with elite level talent used to admit students into the selective pre-college program, designed to serve children with prodigious musical gifts, as well as to the conservatory, which offers Bachelor's and Master's degrees in music performance. The purpose of the student interviews will be to determine how well students' personality and motivational characteristics and conceptions of the variables central to transforming their high level talent into marketable professional level skill matches those enumerated by the teachers and critics. It is hypothesized that those students whom teachers have identified as most successful will be able to articulate the variables most closely associated with success expressed by the instructors and critics, and that a key explanation for that will be in the nature of the teacher-student relationship. The hypotheses will be tested by monitoring employment and professional opportunities displayed by participating students over the course of the study.

Important influences on the development of musical talent are lost to our observation if they are not "caught" along the way. Longitudinal studies designed to test the prediction of eminence from childhood potential can be inefficient because few productive adult creators will emerge from these groups. A more promising longitudinal approach is to identify groups of individuals who have already demonstrated achievements in a domain that retrospective studies have suggested closely precede the emergence of creative eminence. This study employs such a short-term longitudinal study design.

The interviews will be conducted in-person. Students will be asked: (1) about their early musical training; (2) how their present teacher was selected; (3) what the audition process was like for them; (4) the kinds of tacit knowledge they received from teachers; (5) how they deal with competition; (6) relationship with peers who share the same teacher; and (7) what qualities they associate with brilliant performance in their instrument domain.

Faculty perspectives on the following topics will be solicited in order to complement student responses to various facets of the talent development process: (1) their background and training; (2) philosophies and goals for instruction; (3) how they recognize talent and their ideas about the sources of talent; (4) how they plan for individual students; (5) how they prepare students for competition; (6) how and if they attend to student relationships with one another; (7) counseling of most and least successful pupils; and (8) sources of the tacit knowledge they share with their pupils.

We hypothesize that the same attributes hypothesized in the Main Study to lead to success will also lead to success in this study. These attributes are successful intelligence (analytical and especially creative and practical abilities), knowledge of

(continued on page 10)

BEST COPY AVAILABLE

(continued from page 9)

music in general, and performance of the chosen instrument in particular, styles, personality, motivation, and environment. For example, musicians need the creative intelligence to perform pieces in a way that creatively distinguishes them from other performers, and the practical intelligence to know what kinds of creative innovations are likely to be well-received by the public and what kinds are not likely to be well-received. Musicians need to surmount tremendous obstacles (e.g., rigorous practice schedules, critics, occasionally displeased audiences, serious competition) to succeed, and they have to take risks in their careers to get ahead. They also need a supportive environment that helps their musical talents flourish.

Transitions in the Development of Giftedness: Learning Disabilities and Giftedness

Elena L. Grigorenko
Robert J. Sternberg
Yale University

This study is a targeted extension of the Main Study addressing issues of transitional periods in gifted children with learning disabilities. Children who are both gifted and who have a learning disability have unique needs that are usually overlooked by the public educational system. These children may have excellent creative or practical skills that are not assessed by traditional educational methods. Many people have difficulty comprehending that a child can be gifted and also have learning disabilities. As a result, children with special needs that result from such "uneven" profiles of both their high abilities and their learning problems are rarely identified and are often poorly served. For example, Tallent-Runnels and Sigler (1995) examined whether gifted students in Texas who had learning disabilities were being identified for gifted programs. They discovered that 19.7% of all districts surveyed reported selecting gifted students with learning disabilities for gifted programs.

In this study, we propose, in collaboration with the New Haven School District, the Hamden Eli Whitney Museum, and the Yale Art Gallery to: (1) suggest a set of criteria for identifying gifted children with learning disabilities; (2) develop an after-school and weekend program for gifted children with learning disabilities; and (3) use the design of the Main Study to investigate which of the three proposed models (g-based, analytical+creative, successful intelligence) will best fit the pattern of performance in this population of children with special needs.

To match the design of the Main Study, we will attempt to identify gifted children with learning disabilities in grades 5-6, and 11-12. We intend to recruit at least 80 students (about 40 per age group—middle school and high school students). The sample inclusion criteria will be (1) reading or mathematics (or both) specific disability; and (2) exceptional talents in at least one other area of endeavor (academic or nonacademic).

Participants in this program will complete the assessments detailed in the Main Study. The administration of the assessments will enable us to profile detailed and systematic descriptions of the cognitive strengths and weaknesses of the gifted children with learning disabilities. Such profiles will enable us, in collaboration with the Whitney Museum and the Yale Art Gallery, to develop an intervention program for children with gifted-disabled cognitive profiles. The intervention program will be designed as an after-school and weekend program for children from the New Haven public schools who have been diagnosed with LD (specifically, reading disabilities and math disabilities), but show exceptional achievement in at least one other area of endeavor (i.e., music, language arts, arts, sciences). The intervention program will be based on the theory of successful intelligence and will be designed to meet the specific needs of gifted children with learning disabilities by capitalizing on their strengths and compensating for their weaknesses. Both the Whitney Museum and the Yale Art Gallery have extensive experience in creating educational programs for children. The main purpose of this program will be to ensure that students who are gifted and have learning disabilities receive the intervention needed to help them reach their full potential.

Specifically, the program for children with mathematical disabilities will be developed and implemented in collaboration with the Whitney Museum and will capitalize on practical and creative approaches to teaching mathematics, but also will include more traditional teaching for analytical and memory-based abilities. The program for children with reading disabilities will be developed and implemented in collaboration with the Yale Art Gallery and will capitalize on practical and creative approaches to teaching reading, but also will include more traditional teaching for analytical and memory-based abilities.

Thus, this study will allow us to: (1) validate the findings of the Main Study in a population of gifted children with learning disabilities; (2) investigate cognitive profiles of strengths and weaknesses in gifted children with learning disabilities; and (3) produce a package of materials that can be used in intervention work with a gifted population with learning disabilities.

References

Tallent-Runnels, M. K., & Sigler, E. A. (1995). The status of the selection of gifted students with learning disabilities for gifted programs. *Roeper Review, 17*(4), 246-248.

Effective Coaching: Helping Teachers Address Academic Diversity

Catherine M. Brighton
University of Virginia
Charlottesville, VA

Teachers possess individual needs, biases, beliefs, and interests, all of which influence their understanding of professional development initiatives. The life of a teacher—the myriad of classroom details, student and parent issues, not to mention their own personal lives—further impact their ability to accept the invitation to adopt new practices. Subsequently, these and other factors determine whether teachers translate the "message" into changed instructional and assessment practices in their classrooms.

In a study for The National Research Center on the Gifted and Talented (NRC/GT) at the University of Virginia, researchers sought to examine teachers' responses to individual coaching as one part of a larger project investigating academic diversity in the middle school. In 6 middle schools across the country, teachers were challenged to address students' academic diversity through one of two treatments: differentiated instruction or differentiated performance assessment. Targeted teachers participated in 3 years of professional development coupled with individual coaching sessions. Coaches in the project—university professors, district coordinators, retired teachers, and graduate students—possessed knowledge of differentiation and/or performance assessment and had experience working with teachers. Based on the individual schools, coaches faced unique challenges and various amounts of available resources. In the 3 differentiation sites, coaches worked with teachers to identify areas of their teaching that would be most aligned with differentiated units, lessons, and activities. Coaches and teachers worked to determine clearly focused objectives for specific units and lessons, to identify appropriate pre-assessment strategies or tools, and to determine the most appropriate instructional strategy to meet the wide range of learners' needs. Coaches and teachers discussed classroom management strategies, and worked diligently to ensure successful implementation. Some teachers were more open to coaching than others; some brought specific issues and requests to meetings, such as reconciling test preparation and differentiation or learning more about curriculum compacting. While specifics varied across settings, several things remained constant: coaches assisted with resources, information, and support, but the teachers themselves created and used the differentiated materials.

In the 3 performance assessment sites, coaches worked with teachers to identify areas in their curriculum that may be suited for a performance assessment task. Coaches probed teachers' thinking about the units, and brainstormed possible authentic tasks to demonstrate students' mastery of objectives. Hypothesizing that teachers would increase the use of performance assessments if the materials were created for them, project staff wrote differentiated performance tasks and rubrics—embedding the state standards and guidelines into each task—and presented the finished materials to the teachers for feedback and classroom use. Through the process, some coaches worked with individual teachers to develop their own performance assessments.

Roles Coaches Play: Relationships Between Coaches and Teachers

Coaches assumed multiple roles throughout their tenure at the site, none of which were mutually exclusive. The extent to which coaches assisted teachers in preparation of differentiated materials versus preparing materials to teachers' specifications varied by treatment site. Other variations in coaching approaches included individual style, philosophy, and beliefs about teaching and learning. Coaches approached the challenge of delivering new information to teachers in various ways and with differing goals in mind. Some coaches sought large numbers of involved teachers; others were less concerned with numbers of participating teachers, but instead sought a high degree of technical accuracy from the teachers who participated. Some coaches valued the personal relationships and positive interactions with the teachers. Other coaches valued teachers' positive reactions to the message the coach delivered. They believed it was important to be liked and valued by the teachers. A role assumed by some, was that of "savior" or "rescuer." "Savior" coaches took pride in the offerings they provided: liberating teachers from unpleasant previous circumstances, resourcefully locating needed materials and supplies, artfully negotiating more livable working conditions, or finding excuses to get teachers out of district-level workshops or requirements. "Savior" coaches endeared themselves to their teachers by championing the teachers' causes.

> Gretchen repeatedly heard teachers tell her how much they needed more planning time before they could begin to try these differentiated strategies in their classrooms. When Gretchen arrived at the school this month, she made a beeline for the principal's office. She explained to the principal how teachers constantly bemoaned the need for additional time to develop and implement differentiated lessons they were hearing about. She persuasively argued the case for additional planning time during school hours for the teachers participating in the study. Before the end of her visit, she made a point

(continued on page 12)

(continued from page 11)

to share with her teachers how she secured them this valuable resource. *(From Coaches' field notes)*

A role assumed by other coaches was that of "cheerleader." "Cheerleader" coaches generated enthusiasm for the project as a whole. Participation at any level was encouraged, affirmed, and celebrated. "Cheerleader" coaches spent great amounts of time writing personal notes and cards to the teachers with whom they worked. Each note was personalized to encourage the gradual risks teachers undertook in their classrooms. Additionally, "cheerleader" coaches supplied cheerful tokens and incentives to further bolster teachers' positive attitudes about their efforts and the project in general. "Cheerleader" coaches sought continued involvement by increasing teachers' confidence about the unknown, and applauding each step they took in the journey, no matter what the direction.

> Melanie, in her third year as the coach at a performance assessment site, sat with the seventh grade team of teachers as they sketched out the second semester plans. The teachers debated issues and topics such as field trips, when to schedule the dance, and what collaborative project might make sense to work on. Melanie perked up her ears at the possibility that these teachers might suggest a performance task, without her instigating the idea. After discussing the project for several minutes, one teacher suggested the use of a rubric. Melanie was jubilant. "A rubric! They finally thought about using a rubric!" She realized it was a small step, especially given the amount of time the school worked on assessment, but she was thrilled nonetheless. *(Compiled from Coach's interview)*

Another role played by coaches was that of "best buddy." "Best buddy" coaches entered the lives of teachers, emotionally and socially. These coaches identified themselves as peers, equals in the process, despite the difference in roles. "Best buddy" coaches sought to know and assist the teachers in a holistic sense, instead of limiting contact to the scope project objectives. It was not uncommon for genuine friendships to develop between "best buddy" coaches and the teachers with whom they worked, complete with meeting the teacher's family members, joining the teacher's family for dinners when in town, and starting the day "catching up" over a cup of coffee. The personal connection between coach and teacher ensured continued access to the teacher's classroom to witness the journey towards change. Further, it is likely that the teacher will continue on the journey as a sign of friendship and confidence in the coach. However, it does become a more challenging task for the coach when he/she is required to give critical feedback to the teacher.

> Rachel [the coach] turned to catch Lisa's attention, an eighth grade math teacher, as she walked out of the room after the observation. She pantomimed drinking a coffee cup and signaled with her head that she'd meet her for a cup of java after the day was over. The two women had a great deal in common they realized over the year, and would spend as much time gossiping about other things as talking about school. *(Compiled from Coach's field notes)*

For other coaches, personal relationships were not critical to the process of coaching. These coaches believed the message of differentiation or performance assessment was more critical than the messenger. While these coaches did not do anything to hinder a collegial working relationship, they saw no value in cheerleader type enthusiasm, personalized messages of inspiration, or a need to interfere in school-based issues such as planning or materials.

> Pat [the coach] made an appointment to work with Ms. Borden, the 7th grade science teacher, at a time when the students were out of the classroom in enrichment classes. Pat listened as Joan vented with anger and frustration about the extensive time requirements of the performance assessment as written. She didn't take the criticisms personally; the frustration . . . from the teacher was about assessing students in science, not about the teacher or the coach. Pat merely listened to the angry words and then set about to modify the performance assessment so that it better worked with Joan's teaching timeline. *(Compiled from Coach's field notes)*

Expectations of Coaches

Coaches varied in their expectations for their teachers and for themselves, their perception of the initial goal of coaching, and their approach to resistant and struggling teachers. For some coaches, the need to be liked was critical. This need for a sustained positive relationship, and continued invitations into the teachers' world superceded the need for full actualization and technical accuracy of differentiated lessons or differentiated performance assessment. For other coaches, being liked was of little concern: these coaches strived for excellence in the implementation of the approaches. These dichotomous views are represented in the vignettes of two coaches: Alexandra and Bettina.

Coach Alexandra

Coach Alexandra is highly motivated by the personal relationships she develops with the teachers in her school. She works incredibly hard to schedule her visits so she can observe and coach as many teachers as possible and still have time to attend team meetings and listen to the issues and concerns her teachers raise. During the last visit, she found time to attend a field trip with the 8th grade team, which gave her many new insights into the life of 8th grade

teachers and students. She wants teachers to believe in differentiation; therefore she does whatever it takes to find something they can do and feel successful. For Alexandra, all teachers can be successful with differentiation if they just try one baby step—she believes her strengths include working with struggling teachers to help them see that they can do it! When she plans professional development for the teachers, she delivers it in small manageable chunks. If individual teachers need to see the "big picture," she can provide that individually instead of overwhelming the whole group with that information. Alexandra reveals her beliefs about coaching in the following statements:

- Teachers need to be sold on the idea and philosophy of differentiated instruction and differentiated performance assessment, entertained in workshops, [and] convinced, and persuaded to change practices.
- To increase the likelihood that teachers will subscribe to the innovation, I need to affirm them where they are, [and] make them feel good about the journey, even if that means affirming efforts that are somewhat misinterpreted, or low-level. After all, it is better than not doing ANYTHING at all.
- If teachers like me personally they will be more likely to subscribe to my ideas. Subsequently, time and effort is spent on establishing and nurturing personal relationships with teachers in hopes of increasing teacher subscribers. I . . . appeal to the emotions of teachers.
- Teachers that continue to make attempts—even surface applications—are successful if they continue to try. For the sake of discussion, effort equals success.
- I will feel good at the end of the year if we convince a great number of teachers to attempt even a baby step towards implementing differentiated instruction and differentiated performance assessment. We can deal with quality control issues next time around.

Coach Bettina

Coach Bettina is passionate about the topic of differentiation and performance assessment, and is quite knowledgeable about the theoretical underpinnings of each model. She provided professional development to the teachers at her school, and some seemed to really understand and agree with what she shared, while others seemed put off by the work that was required to do each well. She delivered the whole picture of performance assessment. If individual teachers needed smaller steps, she helped because she did not want to hold the whole group back. For the teachers who were interested, she worked tirelessly to help them plan, create, or implement curriculum or assessment for their classes. For the teachers who were not interested or resisted the message, she simply let them go—figuring it was not worth the trouble to try to force herself on those who did not have the capacity or interest to change. Bettina reveals her beliefs about coaching in the following statements:

- The message of differentiation and performance assessment is powerful and should be the determining factor in teachers' decisions to subscribe—not by cajoling and convincing or appealing to the emotions of teachers.
- The message is more important than the messenger. Subsequently, time and effort are spent on explaining the message, providing examples and applications—not spent on getting the teachers to like me personally.
- It is not as important to have many teachers subscribe to the initiative as it is to have examples of teachers who fully understand and implement differentiation or performance assessment accurately and at a high level.
- Teachers who try should be affirmed, but they also need to have feedback about how to improve. There is no benefit in affirming inaccurate understandings about the initiative in the long run.
- I will feel good at the end of the year if we observe quality efforts relative to differentiated instruction and performance assessment even if it is only with a small number of teachers. Consequently, some students will have much richer instruction and assessment and we can deal with increasing our numbers next time around.

Effective Coaching: Striving for Middle Ground

Effective coaching has attributes of both Alexandra and Bettina, but aspires to a middle ground supportive of the efforts of teachers, and still insists on high quality for their efforts. Before one can embark upon the journey of coaching, it is critical that coaches understand the purpose and vision of the end goal. It is likely (and perhaps even desirable) that the vision and end goal may be modified before the end, but having an end goal throughout the process ensures that progress is measured. Coaching necessitates consideration of (a) the personal style of the coach; (b) a careful analysis of the school culture; (c) an understanding of the needs of individual teachers; and (d) an understanding of how individual teachers fare within the school culture. Coaching should be adjusted according to these factors, but it is important to maintain high expectations across the entire school community. Coaches should:

1. Establish positive professional relationships with teachers, administrators, and the school community. At various times throughout the journey, effective

(continued on page 14)

(continued from page 13)

coaches will be required to compliment and praise, as well as critically analyze teachers' instruction and provide thoughtful, corrective feedback. Entering into the coaching relationship with expectations of developing personal friendships may prevent coaches from objectively and accurately assessing the progress or regress of teachers.

2. Strive for a balance between high teacher subscription to the change effort and high quality efforts. At times in the coaching process, the balance may tip towards one end or the other, but overall balance is desirable. For example, when first initiating instructional changes, a savvy coach may try to make the initial steps seem less daunting. As teachers gain experience in the strategies required for change, coaches may analyze efforts more carefully to ensure that teachers fully understand the techniques, and recognize ways to further improve.
3. Strive for a balance between a focus on the message and on the messenger. Support is valuable to teachers as they embark upon the journey into the unknown; and knowing a coach is expecting to see an innovation in action can serve as an accountability strategy for teachers. While it is important for coaches to be liked and respected, the message is also critical. Coaches who worry about "being liked" sometimes avoid the necessary discomfort often present with changing ideas. Slightly uncomfortable teachers, faced with challenges without ready answers, may not initially appreciate the experience and may even express dislike about the coach and the coaching methods. Yet, it may lead to re-examination of the message and their individual beliefs about teaching and learning. Effective coaches, like effective teachers, are not afraid to present challenging circumstances, perhaps just beyond the learners' comfort zones, recognizing that a professional relationship can withstand temporary discomfort.
4. Respond to the individual context surrounding each teacher's change journey. All teachers—like all students in their classrooms—are not the same, and as unique individuals, benefit from different kinds of learning experiences. Effective coaches pre-assess teachers' understandings about the innovation in a non-threatening way, and then provide appropriately matched experiences.
5. Investigate multiple levels of a teacher's context. Coaches quickly recognize that the context surrounding teachers varies greatly across schools; some schools are rich in resources and support, others are impoverished. Effective coaches further notice the subtleties of context that vary across grade levels and even individual teachers. Beginning teachers have different coaching needs than experienced teachers, and teachers with strong content knowledge are able to leap farther than teachers teaching out of their content specialties—an ever increasing phenomenon in understaffed middle schools. Effective coaches assess macro-context and micro-context and modify support accordingly.
6. Provide services of value to the school community. The most important thing a coach can do to increase the likelihood of change in response to academic diversity is deliver the goods. Offer only the assistance that is reasonable and feasible to provide; arrive on time and prepared to work; be selfless about personal agendas; and be open to more than one way to accomplish the goal.

These approaches to coaching sound remarkably similar to the challenges issued to teachers in heterogeneous classrooms—and bear many of the same management and implementation challenges. Effective coaches balance teacher-learners' interests and needs with contextual constraints, recognizing that differentiation of coaching—like teaching—is not a perfect science.

Fund Drive for the Dr. A. Barbara Pilon Poetry Contest

For the last twenty-some years of her teaching career, Dr. Pilon, a beloved member of the Department of Language and Literature from Worcester State College, was on dialysis for severe kidney disease. Her energy and spirit made her an inspiration to those of us who knew her secret. Her energy, imagination, humor and warmth earned her a following among students. She passed away a year ago. The endowment that bears her name was established by her husband to keep her name alive on campus and to continue to encourage causes she cared deeply about. Commemorating her interest in students and dedication to education, the endowment supports an annual scholarship for a Worcester State College English major who intends to become a teacher. As a tribute to her joy in language and creative writing, the endowment also created the Dr. A. Barbara Pilon Poetry Contest and made it possible to continue running the annual Kathleen Downey Short Fiction Contest, both open to all Worcester State College undergraduate students.

English major? Veteran of Mythology? Introduction to Literature? Fantasy, Faerie and Folk? Maybe you even remember Dr. Pilon from your course? If you remember her love of literature and of her students, you may want to join her colleagues by making a contribution to the Dr. A. Barbara Pilon Endowment. Writer? Friend of the arts? Teacher? Even if you didn't have the pleasure of working with Dr. Pilon, please consider supporting this initiative to continue her legacy. Checks, made out to the WSC Foundation with "Pilon Fund" noted in the memo field, can be sent to Worcester State College - Office of Development - 486 Chandler Street, Worcester, MA 01602.

Thank you in advance for supporting the legacy of this remarkable educator and friend.

NRC/GT's Work in the Past Five Years

Robert J. Sternberg
Yale University
New Haven, CT

Underlying our work is the view that abilities represent a form of developing expertise—in other words, that abilities are flexible and modifiable and can be developed into expertise, no matter the starting level. Ability tests can only measure developed levels of competencies. They never show all of which a student is capable.

We believe that many schools metaphorically shine a spotlight on just one kind of student—the student who excels in conventional memory and analytical abilities. Yet, other kinds of abilities—in particular, creative and practical abilities—are at least as important for success in life. Moreover, with proper teaching, they can be important for success in school, too. In other words, many students can achieve at substantially higher levels than they currently do if they are taught in a way that matches, at least in part, their pattern of abilities.

The primary goal of our previous 5-year research project was to compare the efficacy of the theory of successful intelligence to alternative models for teaching. Teaching for successful intelligence involves teaching students analytically, creatively, and practically in order to help them to capitalize on strengths and, simultaneously, to compensate for or correct weaknesses. The alternative models are teaching for critical thinking and teaching primarily for memory. We have done studies now at the elementary and secondary levels in all academic subject-matter areas. Our outcome measures are both conventional achievement tests, as well as performance assessments examining analytical, creative, and practical kinds of achievement. We have tested several thousand students in diverse settings.

- Our main finding is that teaching for successful intelligence is more effective than alternative models of teaching. So far, this finding holds up regardless of grade level, subject-matter area, socioeconomic level, ethnic identity, or type of community (rural, suburban, urban).

- A particularly interesting result is that we get this finding even if the outcome measure is memory-based. In other words, we find that even if one's goal is simply to enhance memory learning, teaching for successful intelligence still is the most effective form of teaching. This is because teaching for successful intelligence enables students to (a) capitalize on strengths, (b) compensate for or remediate weaknesses, (c) encode material in multiple ways to enhance access to that material, (d) rehearse material to a deeper level, and (e) motivates teachers and students more.

- Indeed, in affective assessments, we have found that, on average, both teachers and students are very satisfied with our methods of teaching. So, we not only get superior instructional outcomes, but excellent affective outcomes as well.

- It is further of great interest that, when we measure students' abilities, although White, middle- to upper middle class students turn in better performances on the analytical ability measures, other students (of diverse economic, ethnic, and educational backgrounds) do as well and sometimes better on measures of creative and practical abilities. We believe that this is because they come from backgrounds that force them to develop their creative and practical skills, whereas other students may have the luxury of focusing on analytical (and more academically oriented abilities).

- Sometimes, students do not show their abilities because they believe they will not be valued. In one study, for example, we encouraged students in their projects to think creatively or practically. Our concern was that students often do not think creatively (or practically) because they believe that such thinking will not be rewarded. We found that students indeed showed higher levels of creative and practical thinking when encouraged to think in these ways. So students may have the abilities, but find themselves in classroom settings that do not elicit the abilities.

Editors:

E. Jean Gubbins

Del Siegle

Editorial Board:

Heather Spottiswoode

Lisa Muller

Siamak Vahidi

Judith Mathews

Tonya Moon

Marion Rogalla

Joseph S. Renzulli

The *NRC/GT Newsletter* is published by The National Research Center on the Gifted and Talented, University of Connecticut. The Research Center is supported under the Educational Research and Development Centers Program, PR/Award Number R206R000001, as administered by the Office of Educational Research and Improvement (OERI), U. S. Department of Education.

The findings and opinions expressed in this newsletter do not reflect the position or policies of the National Institute on the Education of At-Risk Students, the Office of Educational Research and Improvement, or the U. S. Department of Education.

Please send change of address notification to the NRC/GT Mailing List at the address below or via e-mail to epsadm06@uconnvm.uconn.edu. Phone (860-486-4676) FAX (860-486-2900) Internet (www.gifted.uconn.edu).

Articles in this newsletter may be reproduced. All reproductions should include the following statement: *This article has been reproduced with the permission of The National Research Center on the Gifted and Talented.*

If articles in this newsletter are reprinted in other publications, please forward a copy of the publication to the address below.

NRC G/T

University of Connecticut

University of Virginia

Yale University

University of Connecticut
The National Research Center on the Gifted and Talented
2131 Hillside Road Unit 3007
Storrs, CT 06269-3007

NON-PROFIT ORG.
U. S. POSTAGE
PAID
STORRS, CT
PERMIT NO. 3

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

	This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
X	This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").